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AMERICAN DRUGGIST  
AND  
PHARMACEUTICAL RECORD.

A SEMI-MONTHLY ILLUSTRATED  
Journal of Practical Pharmacy.

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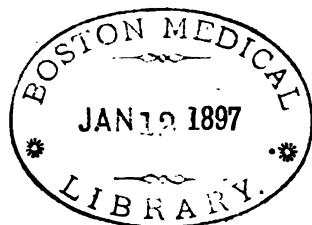
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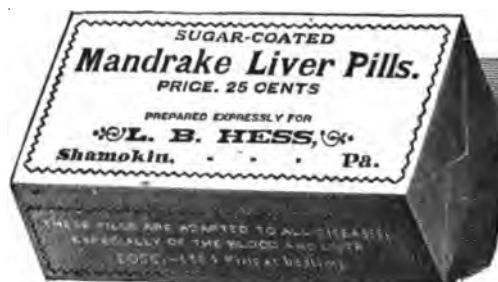
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### Iodoform Substitutes.

Among the many articles that have been brought forward as such, none has as yet been able to take the place of iodoform, which is proved by the fact that this continues to be used by most practitioners, in spite of its very disagreeable odor and other drawbacks. The repeated failures met with in testing the various substitutes have rendered it a matter of extreme difficulty to induce physicians to give a fair trial to further new articles.

This prejudice has been greatly overcome, however, in the case of the new iodine compound "Nosophen" and its salts "Antinosine" and "Endoxine" by the highly favorable indorsement the same have received by eminent German medical authorities such as Dreyer, Koll, Von Noorden, Franck, Noack, Lieven, Zuntz, Binz, Kruse, Siefert, Lassar and others.

The articles have found favor here with remarkable rapidity and we learn from the agents here, Messrs. Stallman & Fulton, 10 Gold street, New York City, that the sale for them is already quite extensive.

There seems to be every indication that Nosophen and its salts are destined to occupy a prominent place among therapeutic agents in the near future.

Nosophen (tetra-iodo-phenol-phthalein) is, as might be inferred, an iodine compound. It is prepared by Drs. A. Classen and W. Lob by treating a solution of phenol-phthalein with iodine. It is a pale yellow, odorless and tasteless powder, insoluble in water and acids, slightly so in alcohol, but readily soluble in ether, chloroform and the alkalies, and contains about 60 per cent. of iodine. It is an acid in its reaction and forms salts with many of the ordinary bases.

Its bismuth salt is known by the name "Endoxine" and the sodium salt by the name "Antinosine." A series of experiments have been carried on with this agent upon animals and man, both internally and hypodermically applied, and iodine has failed to show itself in the urine. In fact no toxic effects whatever were noticed. Dr. Otto Siefert of Wurzburg, Bavaria, therefore undertook to make practical application of its marked desiccating and antiseptic properties by insufflation in the treatment of acute coryza, chronic rhinitis with accompanying hypersecretion, balanitis, soft chancre and eczema, with considerable advantage in all cases.

Dr. Theodor Koll also reports favorable results in the same class of cases.

It is specially adapted, owing to its comparative insolubility and freedom from odor, to the after treatment of operations on the nose by insufflation. It prevents suppuration and formation of adhesions after the application of the chemical or galvanic cauter. It causes no irritation and no secretion in rhinitis sicca. It diminishes the secretion and cures the inflammation very rapidly. It apparently shortens the course of rhinitis acuta. In one case of nasal diphtheria where it was employed the membrane disappeared in four days.

In venereal diseases also it finds special application. Some cases of balanoposthitis were cured in three days.

A case of weeping eczema of traumatic origin was cured in a remarkably short time.

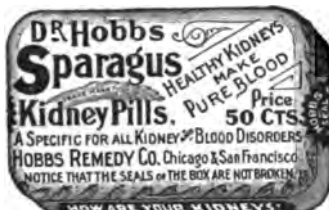
Dr. A. Lieven of Germany first made use of the sodium salt (bluish in color), giving it the name "Antinosine," having found cases in which he desired a soluble salt, which this is. A 1 per cent. solution was found to prevent the further

development of the anthrax bacillus, staphylococcus pyogenus aureus and the diphtheria bacillus within an hour, and has been used in this strength and over by Prof. K. Posner of Berlin, Prussia, and others, in irrigating the bladder in cystitis.

"Endoxine," the bismuth salt, has been used with good effect by Dr. Theodor Rosenheim of Germany in 26 cases of intestinal catarrh, principally chronic. He attributes the good results largely to its antifermentative action and its freedom from deranging action on the stomach, even in dyspeptics.

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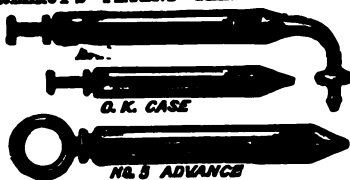
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M. MARIAMSON.

340 EAST 165TH STREET, NEW YORK, December 4, 1895.

## PHARMACY OF THE FORT-NIGHT.

We open this number (page 8) with a dissertation on Aromatic Waters which will commend itself to the pharmacist.

The Borax Industry in America (page 4) is of some historical interest as showing how from importers of borax and boracic acid we have come to be exporters.

Parlor Magic and the Status of the Military Pharmacists in the Armies and Navies of the Leading European Countries (page 5) are both continued from our last issue.

The department of Pharmaceutical Progress (page 6) includes many notes of interest, both practical and scientific, and chronicles the advent of several new remedies, among which are Phenosuccin and its salt Sodium Phenosuccinate, Amygdophenin, Phospherergot and Fer Cremol.

Dr. Chas. O. Curtman of St. Louis has favored us with his report (page 8) to the Pharmacopoeia Committee on the Chemical Composition of Bismuth Subnitrate.

Wrinkles in Dispensing (page 9) embraces a number of notes on various topics, each of value to the dispenser.

Professor J. U. Lloyd's paper on Distilled Water (page 10) has that value which always attaches to his work.

Prescription Statistics are made of much value (page 11) to the manufacturers of proprietary medicines by the publication of the names of the articles prescribed.

Dr. Alfred R. L. Dohme and Hermann Engelhardt presented a paper at a recent meeting of the Philadelphia College of Pharmacy on Kola Nuts, which we publish on page 10, and on the same page Alexander Gunn contributes a note on a Fluorescent Constituent of Calumba.

Chinese Opium has been studied by Frank Browne, acting Government analyst at Hong Kong, and we present (page 18) the conclusions arrived at.

An Ingenious Fraud and Dining on Bouquets are two interesting notes on page 14.

The Studies on Cherry Bark by Dr. A. R. L. Dohme and Hermann Engelhardt, the first records of which appeared in this journal, on page 251 of the volume just closed, have been prosecuted still further, and the results are set forth at length on page 15.

The Jaborandi Leaves of Commerce have been further studied by E. M. Holmes (page 17), who tells of their botanical origin.

## THE OUTLOOK FOR THE JOBBER.

The Denver trade seem to be a little unfortunate just now, as two of their proposed reforms have not materialized, though at one time both the measures in question seemed almost certain of adoption.

The Proprietary Committee of the N. W. D. A. were at great pains to elaborate a plan for the control of the sale of proprietary goods, and this plan received the hearty approval of the Association at Denver. But when it was informally laid before a dozen or so of the largest manufacturers they pronounced the plan not feasible, or at least declined to act under it. By the way, the action of these manufacturers was spoken of by some at the time as being the action of the Association of Manufacturers and Dealers in Proprietary Goods. This was an error, as the plan was not laid before that body. It was merely submitted to an informal meeting of a few large manufacturers with the object of eliciting their opinions. Those opinions were so unfavorable that the plan was not formally presented to the Association for consideration.

## THE BOX AND CARTAGE CHARGE.

The question of charging for boxes and cartage was then taken up with every apparent prospect of success. The committee having the matter in charge visited the principal Eastern cities, and after being duly wined and dined returned to their respective homes, leaving the trade under the impression that the charge was to be inaugurated promptly on January 1. The retail trade, however, seemed no more anxious to co-operate with the jobbers in this measure than were the proprietors on the Denver plan. It would probably have gone through, however, but for one Boston firm which has declined to enter this convention, just as it has declined to enter other conventions subscribed to by other jobbers. It remains to be seen whether this recalcitrant firm can be brought into line, for if it is not there is little hope for the inauguration of the charge.

**WHY THIS AGITATION?**

It is a significant fact that two such important measures should be undertaken almost simultaneously by the jobbing trade, and that both of them should have proven to be failures. The cause of their being undertaken and the cause of their failure seem to lie in the changing conditions of trade. It is not without interest to know that there are fewer wholesale druggists in business now than there were ten years since. This of itself is an indication that the natural growth which should have made the increase in the number of jobbers commensurate with the increase in the number of retailers, has been offset by the development of unfavorable conditions. The jobbing druggists have been compelled to seek some means of counterbalancing these unfavorable influences, and the Denver plan and the effort to introduce a box and cartage charge are but two of the methods which have been essayed for this purpose, though they are the most important which have been undertaken by the N. W. D. A.

**JOBBER AS MANUFACTURERS.**

These are not the only methods which have been tried by the jobber, for a survey of the field shows that the purely jobbing trade is by many being subordinated to their interests as manufacturers, while others who have not yet reached this stage are quietly but effectively making their way toward it. The question, "Must the middlemen go," will apparently be answered by a compromise. We must have middlemen, but it seems that we must either pay them more for their services than we are paying them, or we must expect them to become manufacturers as well as middlemen.

**A MULTIPLE BOARD.****DO THE STANDARDS VARY?**

It is charged that the standards adopted by the four different boards of pharmacy in New York State vary materially, with the result that applicants of limited attainment select the easiest board, pass their examinations before that board, and on the strength of the certificate so obtained demand registration at the hands of the other boards of the State. So far we have seen no equable and feasible solution of the difficulty suggested, and would therefore suggest in rough outline a plan which if it were adopted would meet most of the objections which have been raised to the existing conditions.

**A CURE FOR THE EVIL.**

Let there be what might be termed a multiple board, formed by the consolidation of all four of the existing boards, and have the mem-

bers for each of the four sections of the board be selected in the same way as at present. Let the entire board formulate rigid and clearly defined standards for three grades of certificates, for which three different prices should be fixed, and have the law so framed that only holders of a first-class certificate could open or conduct a drug store in cities having a population of — or over, while assistants in such cities should be required to possess at least a second-class certificate. Holders of second-class certificates should only be permitted to open and conduct stores in, and holders of third-class certificates should be permitted only to act as assistants in, cities of less than the specified population.

The minimum size of the city in which first-class certificates should be required, as well as other details, could be determined by conference between the existing boards, and any bill which has the united support of the four boards of the State would have but little opposition in the Legislature.

**SUPPLYING MEDICINE FOR CHARITY PATIENTS.****TABLET TRITURATES FOR THE POOR.**

Our North Carolina correspondent tells in our news columns how the vexed question of supplying the poor of Raleigh with medicines has been determined. The druggists of that city are to be ignored entirely, and a physician employed at a salary of \$800 per annum, for which he is not only to attend the poor, but is also to furnish them with the medicines required.

When the physicians prescribed and the city paid for the medicine there was much complaint of the expensive character of the medicines ordered. Now we learn that tablet triturates and compressions are to be used, to the exclusion of any other form of medication. In justice to the physician selected for the office it should be borne in mind that, so far as we are aware, he has not been accused of ordering expensive medicines at any time, and it is quite possibly merely a coincidence that a physician has been selected who believes in tablet triturates.

The Raleigh local Druggists' Association protested against the change of system to the extent of appointing a committee, consisting of J. Y. MACKAY, JAS. I. JOHNSON and J. H. BOBBITT, to wait on the city fathers and speak in behalf of the retail druggists.

This committee however, did not appear directly before the board, deeming it useless, as they had ascertained that the physicians had had their plans "cut and dried" long beforehand.

**THE MEASURE OF THE DRUGGIST'S RESPONSIBILITY.**

THE responsibility assumed by the retail druggists in selling drugs is fully recognized even where no legal restrictions are placed upon the practice of pharmacy. This is very clearly shown by the fact that though there is no pharmacy law in Indiana the Court of Appeals of that State has established the following law in the case of JARVIS HOWES *et al* vs. Ross, recently delivered in that State:

1. One engaged in the sale of drugs is held to a special degree of responsibility, and the care required must be commensurate with the danger involved, and the skill employed must correspond with that superior knowledge of the business required by law.

2. Drugs sold in small quantities from broken packages affords a vender opportunity of seeing, knowing and determining the character of the drug, and if guilty of negligence in making the sale, he must respond in damages.

3. The mere sale of the wrong drug by a vender does not establish a *prima facie* case of negligence, and where he may have taken every precaution required of him by law, the absence of a finding of facts constituting negligence is insufficient to support a special verdict in favor of one damaged by the purchase and use of the wrong drug.

**WRITE TO YOUR CONGRESSMAN.****THE MILITARY PHARMACIST.**

Ex-Speaker CRISP of Georgia has introduced into Congress the bills for the reorganization of the pharmaceutical service in the United States Army, the United States Marine Hospital Service and the United States Navy, which were printed in the AMERICAN DRUGGIST for October 10 and November 25, 1895. These bills are modest in their demands and should pass without any opposition. Each of our readers can aid in securing their passage by addressing at once a personal letter to his Representative in Congress, asking him to support H. R. bills 1662, 1663 and 1664 (for so they are known), and to the Senators from his State, asking them to support the same bills, which have been introduced into the Senate by Senator Bacon of Georgia. The bills give the pharmacist in the army the rank and pay of sergeant major, and in the navy that of a warrant officer.

Hon. Amos J. Cummings, former chairman of the Committee on Naval Affairs of the House of Representatives, writes us: "I am in favor of the bills. . . . I shall do all I can to secure their passage."

Written for the  
American Druggist and Pharmaceutical Record.

## AROMATIC WATERS AND THEIR PREPARATION.

Each succeeding Pharmacopoeia brings with it some change in the mode of making aromatic waters. The Pharmacopoeia of 1870 recommended the use of magnesium carbonate as an absorbent medium, and as far as appearance and aroma of the freshly prepared waters were concerned this mode left little to be desired; but the waters so made did not keep well and were objected to on account of the small amount of magnesia that remained in solution.

### MAGNESIA OBJECTIONABLE.

Magnesia was discarded in the Pharmacopoeia of 1880, its place being taken by absorbent cotton, as suggested by Professor Remington. But this failed to give the satisfaction that was expected of it, and again in the Pharmacopoeia of 1890 we find another change and absorbent cotton abandoned, and precipitated calcium phosphate recommended in its place. Of the three we must confess to a preference for the calcium, but even by this process the waters so made sometimes develop organic growths and decompose. From time to time we have seen various recommendations in regard to the best methods of preventing these changes. The value of talcum as a neutral absorbent agent is strongly urged by some, and paper pulp has also had its advocates. But all of the methods hitherto proposed have been open to the same objection—that the waters so made do not keep.

The same is true, but not to so great an extent, of waters made by distillation. Aqua Cinnamomi made from bark deposits a brownish resinous substance which contains cinnamic acid. Even distilled water is apt to go wrong. Speaking of aromatic waters, attention is expressly called to the fact that none but distilled water should be used.

### DISTILLED WATER SHOULD BE USED.

We find the statement made—and it is needed—that in the making of aromatic waters distilled water should be used in preference to ordinary water when prepared by any other means than distillation. There are many pharmacists, however, who do not heed this precaution, whether they use distilled water in their prescription work or in making their preparations. In one pharmacy visited recently the water bottle, or what passed for it, was seen to contain a thick brown deposit. We asked the proprietor as to the uses to which the fluid was to be put, and he told us it was water that he was preparing to make silver solution with; that he added a small amount of silver nitrate to the water and allowed it to stand a few days and then filtered off the deposit. He evidently had gotten his idea from some photographer, for this is a common practice among photographers. But while well enough in a photograph gallery, it is very poor practice in a pharmacy.

In these days of hypodermic medication the pharmacist cannot be to particular as to the character of the water he uses. Not only should distilled water be used for making hypodermic solutions, but the water should be carefully sterilized before using. This, however, is a digression.

Among the older processes recom-

mended for preparing aromatic waters we would like to state our preference for paper pulp with which to absorb the oil, and the use of warm (but not hot) water. This is an easy way of preparing the ordinary aromatic waters in any quantity wanted for immediate use; but waters so made do not keep well, and soon lose their aromatic properties.

Paper pulp is indeed a handy thing to have in the laboratory, and being unobjectionable from a chemical standpoint is elegant for use in preparing elixirs.

### DISTILLED WATERS DON'T KEEP.

The process of distillation has long been recommended as the best with which to prepare aromatic waters, but we have not found that waters made by distillation from the drug itself are notable for their keeping qualities, and in the case of a few waters the process is inadmissible, as in those of lemon and orange, as sometimes called for.

As mentioned above, cinnamon water when prepared from the drug by distillation throws down a precipitate and soon deteriorates. Peppermint water will also be found to be unsatisfactory when made by distillation from the drug. Why this is so we cannot tell, but this has been our experience.

The new Pharmacopoeia has adopted stronger rose water and orange flower water in place of the formula given for the production of these waters in the preceding revision. These are made largely in Europe, many times as a by-product in the manufacture of the oils of the flowers. These waters are very much finer than any that can be made from oil rose or oil orange flowers. In this country it is impossible for the pharmacist to prepare his orange flower water from the flowers, and he must depend on the importing houses for his supply; but the fact remains that any pharmacist who will take the pains to gather the fresh rose petals and distill them himself need have no cause to be ashamed of the rose water so made. While those waters (orange and rose) of the new Pharmacopoeia are all that can be expected as far as perfection of product is concerned, the directions given for keeping them are extremely unsatisfactory. We have had occasion during the past five years to handle several hundred gallons of imported waters of this kind, and we have found that in order to conserve them it was essential that the solutions should be exposed to the air and be loose stoppered. We recall two demijohns of rose water bearing the well-known label of Schimmel & Co., Leipzig. Two demijohns which had been kept in the cellar tightly corked for two or three months, when opened for use had but little of the odor of rose water, being musty and disagreeable; but a few days' exposure to the air brought them around all right until they were again the elegant products that we expected. This is also true of orange flower water, and we are of opinion that it is true more or less of all waters. A prominent importer wrote us recently in answer to a complaint about a copper of rose water being spoiled on arrival: "Leave cork out of copper for several days and water will be all right. We never do this ourselves, but it is a general practice among some importing houses to do so." It is all a mistake to cork them tightly, and leave them so. We do not wish to be understood as recommending that the cork be left out altogether, but that it be left out occasionally to allow a certain amount of

aeration. It is a practice with some pharmacists to make both rose and orange flower water from the oils, but this cannot be too strongly condemned, for they do not keep and are not comparable in any way with the distilled waters made from the rose petals or orange flowers. Waters of this kind if made by distillation keep indefinitely.

### DETERIORATION WITH AGE.

It is an easy matter to prepare an aromatic water that will have the desired aroma while fresh, but to prepare one that will retain its odor and freshness is another question. This has been a troublesome question with most pharmacists. Many have adopted the plan of distilling all aromatic waters except lemon and orange, and this has our strongest approval. We follow the practice invariably, using a considerable excess of oil. The oil passes over with the water, and when first distilled is milky with oil, but on standing the oil rises to the top or sinks to the bottom, according to its weight, leaving the water bright and clear and very fully flavored with the oil. This process is also followed in making camphor water. When desired for use it is drawn off with a siphon rejecting the first small amount that comes over. Waters so made and stored with an excess of the active ingredient keep perfectly and leave nothing to be desired as to aroma.

In England and on the Continent aromatic waters are much more largely used than in this country, and much more attention is given to their proper preparation. In England it is a common practice to prepare aromatic waters from the so-called concentrated waters. This practice has never gained any headway here, and we have no opportunities of examining these concentrated waters, so can express no opinion in regard to their value. The claim is made for them that one part of stronger or concentrated water mixed with 40 of distilled water produces a pharmacopoeial aromatic water.

### BY MACERATION.

In the "Chemists' and Druggists' Diary," some years ago, it was recommended to prepare aromatic waters by shaking an excess of the oil dissolved in alcohol with distilled water and allow the excess of oil to separate by standing, and when desired for use to draw off with siphon as directed above. The formula recommended was:

Essential oil.....	f. 3vj
Alcohol.....	f. 3iv

One ounce of this added to  $\frac{1}{2}$  gallon of distilled water and the whole allowed to remain at rest and the excess of oil allowed to separate. This process is satisfactory enough. Waters so made will be found much superior in flavor and keeping qualities to any in which an excess of oil is not used.

There is a considerable excess of oil ordered in the formula, and it is contended by some that this is only a waste of oil. But in our opinion this amount of oil makes a better water in every way than when less oil is used. Why this is so we cannot explain. Most oils are complex mixtures and not simple substances, and the constituents giving most character to the water are present in small quantities or pass into solution with difficulty. The proportions of this formula have been used with satisfactory results in the preparation of waters by distillation, as above.



Written for the  
American Druggist and Pharmaceutical Record.

## THE BORAX INDUSTRY IN AMERICA.

Two names and two events stand out pre eminent in the history of the borax industry in America. These are the detection, on January 8, 1856, by Dr. John A. Veatch, of borax in the waters of a spring 8 miles east of Red Bluff, Cal., and the discovery of Teel's Marsh by F. M. Smith, in the fall of 1872, about 10 miles from Columbus, Nev. The borax found in the spring water by Dr. Veatch was the first borax discovered in America, while from Mr. Smith's discovery dates the era of cheap and therefore popular borax.

In the waters of the spring in which Dr. Veatch detected the presence of borax there was not a sufficient quantity of the salt to warrant its use as a source for the article on a commercial scale, but further investigation convinced the doctor of the presence of borax in both springs and lakes in different portions of California and in company with Col. Joel Lewis, a famous bear hunter of Sacramento, Dr. Veatch set out to hunt for a mountain of "a white pulverulent substance," and of a rivulet of water which was totally unfit to drink, and of an Irishman who knew of a borax lake, all of which he had heard of through Charles Fairfax and Colonel Lewis. The mountain turned out to be a big bank of sulphur, the borax lake was merely a lake of salt, and the Irishman alone was genuine.

### THE FIRST PRODUCTION OF BORAX IN AMERICA.

In the course of the journey, however, under the guidance of a Mr. Hawkins, the doctor came upon 200 acres of mud redolent of sulphureted hydrogen and soapy with the presence of alkali. From this lake was taken the first borax ever produced on a commercial scale in America. The water at an average stage contained 0.089 per cent. of solid matter in solution, of which 61.8 per cent. was sodium carbonate, 2.4 per cent. sodium chloride and 17.8 per cent. sodium biborate. Shortly after Dr. Veatch's visit very large crystals of borax were found, some of which measured from 5 to 7 inches in length, green in color and very perfect in form. Dr. Veatch formed a co-partnership with Dr. W. O. Ayers, and a coffer dam being sunk, a large quantity of the crystals was secured. Borax was also obtained by sinking a well in the mud and evaporating the water thus obtained. At this time—in 1856-57—borax sold at 50 cents per pound, wholesale. As extracted from this lake it could be laid down at 8 cents per pound in San Francisco. In 1864 a company, under the superintendence of Dr. Ayers, began the manufacture of borax, and the value of the output rose to about \$132,000 annually. At the end of four years, however, the lake was ruined by flooding from an artesian well the flow of which the miners were unable to check.

Another lake of the kind known as Hachinhama was discovered in the same locality, Lake County, but the sodium carbonate was in such large excess that it was necessary to crystallize it with the borax and afterward wash it out.

### CALCIUM BORATE IN NEVADA.

In 1872 deposits of calcium borate, ulexite, or as it was locally known,

"cotton balls," were found in Nevada, and this salt was brought in in large quantities and mixed with the waters of the Hachinhama lake, when a double decomposition occurred between the sodium carbonate and the calcium borate resulting in the formation of sodium biborate and insoluble calcium carbonate, but the Nevada miners had the advantage, since they found dry borax and borates in the crude state in places very easy of access, and the prices of the product fell rapidly.

### F. M. SMITH DISCOVERS TEELS' MARSH.

In the fall of 1872 F. M. Smith, now president of the Pacific Coast Borax Company, was engaged in prospecting in the neighborhood of Columbus, Nev. Mr. Smith had been following mining camps from Montana to Idaho, and from California to Nevada, since April, 1867, and like all prospectors had accumulated a number of mining claims and resorted to various expedients to make a livelihood pending the development of these claims. Just before he discovered Teel's Marsh, Mr. Smith had purchased a wood ranch and erected thereon a comfortable little shanty commanding a view of what he found afterward to be the rich borax deposit in Teels' Marsh.

An alkali marsh does not resemble what is known in the East as a marsh, for it is not watery and not necessarily of soft consistency, as it is composed of a dry lagoon or surface incrustation of alkali of some kind, either soda, salt or borax. The surface varies from light grayish to white in appearance, often covering large areas.

One day Mr. Smith observed the white incrustation on Teels' Marsh, and taking two of his choppers with him he visited the marsh and found a heavy incrustation, which upon assay proved to contain a very large proportion of borax. Hurrying back, he located as large an area of the marsh as he possibly could. Up to this time borax lands had been located under the saline laws of the State, under which one locator could take up 160 acres; but a change was made in this respect so that no one individual would be allowed to take more than 20 acres. It was therefore necessary to secure the co-operation of a number of persons who would allow their names to be used as locators, and some of these people after having had their entries made declined to give up their interests upon the terms originally agreed upon, and as a result of this their claims had to be bought up at considerable cost.

### JUMPING A BORAX CLAIM.

At one time seven locators came onto the marsh and took forcible possession with guns in their hands, and eventually had to be ejected by the courts. At this time the price of borax was 80 cents per pound, wholesale, and was little known save to druggists and blacksmiths, and was retailed by druggists at 25 cents per ounce. The total consumption in the United States reached hardly more than 600 tons per annum. F. M. Smith and his brother erected an extensive plant for the purification of borax on Teels' Marsh, and this has been worked almost continuously ever since, and the output from this plant has almost controlled the market since it was put into operation, though the price had declined from 80 cents to 10 cents per pound before the Smith Bros. succeeded in getting their product on the market.

### BORAX FROM THE MINES.

For a long time it was supposed that the alkaline incrustations and deposits were the only forms in which borax existed, but while working the Death Valley borax deposits, a stratum of calcium borate in crystalline form was found near the silver mines of the Calico Mountain. This material occurred in a well defined layer or vein which was found to average nearly 6 feet in thickness. This form of calcium borate was named "colemanite," in honor of W. T. Coleman, the leader of the San Francisco "Vigilantes," who had been associated with F. M. Smith in his business ventures leading to this discovery. The Death Valley deposit was worked for a time only, because on account of its inaccessibility and the absence of suitable fuel it could not be worked profitably at the prevailing low prices of borax.

The Calico borate of lime mines have taken the place of the marsh deposits, and now furnish the chief source of supply, the marsh product constituting but an insignificant fraction of the total Pacific Coast product.

### THE CONDITION OF THE INDUSTRY TO-DAY.

The three forms in which borax has been most plentifully found are tincal, or crude crystalline borax, this name being that applied to the same article in the East; ulexite, or calcium borate, commonly known in the borax region as "cotton balls," and crude borax, or sodium borate in a granular condition, such as is found in Teels' Marsh, although "cotton balls" are also found in Teels' Marsh. The deposit in the borax mines in the Calico Mountains consists of calcium borate in stratified formations, differing in its characteristics from that existing in the cotton balls, and, as stated above, this deposit in the Calico Mountains is termed "colemanite." While these are the principal forms in which borax occurs, the report issued by the California Mining Bureau states that 22 natural borates have been found. One of these, a calcium borate, named hayesene, is found at Bergen Hill, N. J.

### WORKING COLEMANITE.

The crude calcium borate, or colemanite, is hauled from the mine from which it is obtained in the Calico Mountains to Daggett, where it is shipped by the carload to Alameda. At this point there is a factory embracing three buildings, three stories high, covering nearly 26,000 square feet of ground, and two one-story buildings covering about 15,000 square feet. Here the crude calcium borate is fed into a breaker, whence it goes into a mill and is ground up into a very fine smooth powder. At the same time sodium carbonate, obtained by solar evaporation from the water of Owen's Lake, Inyo County, Cal., is also powdered and the two salts are dropped into iron boilers filled with water and provided with stirrers and heated by steam coils. Double decomposition occurs, resulting in the formation of sodium biborate, which remains in solution, and calcium carbonate, which is precipitated.

The solution is then run off into crystallizing tanks and the precipitate remaining in the boiler is thoroughly washed to obtain all the borax adhering to it. The borax obtained by this first crystallization is slightly objectionable in color and has to be recrystallized to make it absolutely pure. The mother liquor is run back into the boilers and

utilized in the further decomposition of calcium borate and sodium carbonate. The impure borax from the crystallizing tanks is dissolved and the solution run into vats which are between 5 and 6 feet deep and about the same in diameter. In these tanks stout wires are suspended and the borax crystallizes out on these wires from the hot solution. These crystals are pure and adapted to general use. They find their way into commerce in crystal form as "refined" borax, and pulverized as "powdered refined."

The crystals forming on the bottom of the tank are somewhat impure and are used in the arts such as blacksmithing, etc. In the factories at Columbus, at Teels' Marsh and at Rhodes' Marsh "cotton balls" are used instead of colemanite, but the chemical processes are the same as in the factory at Alameda. At the three former factories the boiling is done in open vats and the stirring is generally done by hand. At Rhodes' Marsh and at Columbus the vats are heated by steam. There are also small outfits around the Columbus, Teels' and the Fish Lakes marshes. The marsh at San Bernardino produces only sodium baborate and not calcium borate. It is therefore only necessary to make a solution, which is done by boiling the crude borax with water by the means of crude petroleum, allow it to settle and draw it off into large cement vats, and here it cools and crystallizes out. The borax thus obtained, however, requires another crystallization before it can be placed upon the market. Although the San Bernardino Marsh is 70 miles from any railway the works are admirably designed and models in mechanical construction.

#### OTHER SOURCES OF BORAX.

Borax has been utilized by man since very great antiquity, though its early history is vague and indefinite. Borax was largely used by Nero, and Panza "deeply regretted that he was not rich enough to buy borax to cover the arena after the fight between Lyden and Tharides." M. Fourcroy stated, in 1790, that "we get this salt from the East Indies," and it seems that in Thibet there exists a series of lakes somewhat resembling those in California and Nevada, and it is from the opaque crystals obtained from these lakes that we get the name of tincal for the crude borax crystals. In 1742 Targoni Tozzetti discovered the presence of chasms in the vicinity of Castelnuovo from which heated vapors escaped and upon investigation he found pools containing solutions of boracic acid. Attempts were made to utilize these solutions, though with only a moderate degree of success until, in 1827, François Laradrel hit upon the expedient of arranging a series of vats or pools in a line down a hillside, so that the vents for the subterranean gases were in these pools thus utilizing the subterranean heat for the concentration of the acid solution. For many years this was the principal source of supply of borax for Europe and the United States. In 1886 a double calcium borate was found at Iquique, in South America, and large deposits have since been discovered in the Island of Potosia and Bolivia. In 1870 deposits of borates were also discovered on the Tchinarsalva, about 40 miles from Panderma, on the Sea of Marmora. These deposits are now being worked by a British company under concessions from the Turkish Government.

#### THE USES OF BORAX.

The uses of borax are constantly increasing both in number and in impor-

tance. In the old days when borax sold at 50 cents a pound its use was confined almost exclusively to the blacksmith and to the very small quantities then utilized in medicine. Probably its largest use now is as a meat preservative, and probably its largest use in the future will be as a household article for general cleaning and toilet purposes. It has very many advantages in both these directions since it is much more powerful as a preservative than almost any other non-toxic salt that could be utilized in this connection, while as a cleansing agent it is much cheaper than soap, because it is so much more efficacious and is much more agreeable and more generally available than sal soda. The uses of borax in the household and in household medicine are so numerous, however, that it is almost impossible to name them all. Among its great advantages is that it is not poisonous to man. It is therefore more safe as a disinfectant than is carbolic acid, ferrous sulphate, copper sulphate, corrosive sublimate or chloride of lime. It can be more safely added to water to soften it than can ammonia.

#### THE WORLD'S CONSUMPTION.

It was estimated in 1892 that the world's output of borax amounted to 28,000 tons annually, obtained from the following sources:

	Tons.
Asia Minor.....	9,000
Thibet.....	2,000
Italy.....	2,000
Chili and Bolivia.....	2,000
California and Nevada.....	6,000

The rapidity with which the use of borax has increased is marvelous, for competent authorities reckon the Pacific coast output for 1875 to have been 2,500 tons; 1885, 3,700 tons, and 1895, 6,700 tons.

Manifestly the use of borax is but in its infancy, and we can confidently look forward to a continuous and rapid development in the demand for it.

### PARLOR MAGIC.

(Continued from page 373, Volume XXVII.)

#### THE HUMOROUS EGG.

In a quill place a small quantity of quicksilver, and, having fastened it well in, insert the quill through the end of a newly boiled egg. The egg being placed on the table will dance about until cold.

#### A LIQUID PRODUCED BY TWO SOLIDS.

Rub together in a dry mortar equal portions of ammonium carbonate powdered and blue vitriol powdered; these will yield a blue liquid. A colorless semi-liquid may be obtained by rubbing together equal parts of sodium sulphate powdered and lead acetate.

#### TO PRODUCE FIRE FROM TWO LIQUIDS.

Take 1 ounce of turpentine and  $\frac{1}{2}$  ounce of nitric acid, with a few drops of sulphuric acid in the nitric acid.

*Directions.*—Pour the turpentine into a saucer, then add carefully the nitric acid. It will immediately burst into flame.

#### THE MYSTERIOUS BOTTLE

will make many wonder "how it's done." The bottle (2 ounce or 4 ounce) is fitted with a perforated cork and bent glass tube, reaching to the bottom. Half an ounce of ether is put in and the bottle is filled up with water. If the bottle is put into hot water it will immediately begin

to empty itself; if it is then put into cold water it will begin to fill again.

*Note.*—Care must be taken with the experiments with ether, as its vapor is very inflammable.

#### THE SEA ON FIRE.

*Materials required.*—A soup plate, some potassium and naphtha, and a few paper ships.

*How to proceed.*—Fill the plate with water, pour a little naphtha on the water, then place the ships in position. Now make such a remark as, "I am now about to burn the fleet of King Tim Buck Too, the King of the Cannibal Islands." Throw a piece of potassium into the plate, and you will have a fleet on fire. Potassium and sodium are light, soft metals which have so strong an attraction for oxygen that they will separate this element from its combination in water and unite with it so violently as to burst into flame. The conflagration may be extinguished by covering with a second plate.

#### THE DANCING FIRE BALL.

*Directions.*—Procure a stout and tolerably wide test tube. Place into it a teaspoonful of powdered chlorate of potash and heat over a spirit lamp. When it is liquefied and begins to boil drop into it a piece of charcoal about the size of a pea. It will immediately begin to glow and will dance about on the surface of the liquid as if alive.

### PHARMACISTS IN THE ARMIES AND NAVIES OF THE LEADING EUROPEAN STATES.\*

#### VIII.

##### Switzerland.

During peace there are no military hospitals in Switzerland, nor has Switzerland a standing army in the sense in which the term is used in Germany. Universal military service is indeed strictly enforced, but the military exercises are confined to periods of a few weeks.

Those who become sick receive their medicine from an ordinary pharmacy and medical treatment in ordinary hospitals with which contracts have been made.

#### THE PEACE ESTABLISHMENT.

Therefore only one professional military pharmacist is employed in Switzerland, viz., the Staff Pharmacist with the rank of a major.

He is at the head of the military pharmaceutical affairs in peace and in war, and is the technical adviser of the highest medical authority in the army, the Chief Field Surgeon of the military department.

He agrees upon the military medical tariff with the Swiss Pharmaceutical Association, and submits it to the Chief Field Surgeon for his approval. He is

\* Translated from the *Pharmaceutische Zeitung*, by Otto Hoffmann, A.B., under the direction of Dr. Geo. F. Payne, chairman of the Special Committee of the A. Ph. A. appointed at the Asheville meeting to work for the fuller recognition of pharmacists in the army and navy of the United States. The publication of the series was begun in this journal for September 10 and so far there have appeared descriptions of the position of the pharmacist in the German army (September 10), the German navy (September 25), the Austro-Hungarian service (October 10), the Italian service (October 25), the French service (November 25), the Russian service (December 10), and the English service (December 25).

the expert for the examination of medicines that are delivered, of medical bills, and for chemical examinations. He also has some other duties.

#### THE PHARMACEUTICAL DEPARTMENT ON A WAR FOOTING.

Provision has been made for the calling together of a sanitary force in case war should occur. This force is organized as follows:

1. Sanitary officers, divided into (a) surgeons and (b) military pharmacists.
2. Sanitary forces, divided into (a) non-commissioned officers, (b) attendants on the sick and (c) carriers of the sick.

In war the Swiss army has the following pharmacists at its disposal: 1 staff pharmacist, 8 pharmacists of camp hospitals and 40 ambulance pharmacists.

#### RANK OF THE PHARMACIST.

The military pharmacists, who without exception have officers' rank, are prepared in peace in so-called "Schools for

the Preparation of Sanitary Officers." The courses in these schools last 84 days. Some physicians are also called to these schools. A special uniform with marks indicating their rank is granted to the military pharmacists. After the military pharmacists have become prepared they are summoned to receive courses with the troops with whom they belong, and must become familiar with their duties in camp hospitals and ambulances.

#### EDUCATION OF THE SWISS PHARMACIST.

The education prescribed for the Swiss pharmacist comprises graduation from a literary college; then two years practical experience in a drug store and passing an examination entitles a man to be clerk; then one year as clerk and two years of special study at a university, ending with an examination in which, in some respects, more is required than in Germany.

No further special preparation is required of a military pharmacist.

and which was recently referred to in these columns. It occurs as a bluish white, odorless salt of a saline taste and is soluble in 25 parts of water. It acts as a bactericide in 1 per cent. solutions. It is recommended as an antiseptic for use in ophthalmology in  $\frac{1}{4}$  per cent solutions and is said to be superior to corrosive sublimate, silver nitrate or formol.

Amygdophenin is a paramidophenol derivative in which in one of the hydrogen atoms of the amide group is replaced by an ester of amygdalic acid, and the hydrogen atom in the hydroxyl group is replaced by ethyl carbonate. It was first prepared by Hinsberg and Blum and has been commended as an anti-rheumatic by Dr. Stive of Frankfurt (*Wien. Med. Presse*), who administered it in doses of 1 gm. (15 grains) from one to six times daily, in a powder or tablet. Amygdophenin occurs as a grayish-white light crystalline powder, very difficultly soluble in water.

**Gallsia Gorazema.**—According to Peckolt, *Gallsia gorazema*, Moq., grows in all the tropical States of Brazil. All portions of this large tree possess a strong odor, resembling that of a mixture of garlic and asafetida. The flowers are used by the inhabitants as a remedy for hysteria, etc., in the form of a tincture or a fluid extract, and for ascarides, mixed with a mucilaginous vehicle, as an enema. The fresh and bruised flowers and leaves are applied to the skin instead of mustard plasters. An infusion of the leaves, and buds of the same, are employed in dropsy.—*Pharm. Rund.*

**Method of Preparing Bone Marrow.**—Three ounces of fresh bone marrow (as much red as possible) are made up into a paste with port wine, 1 ounce; glycerin, 1 ounce; gelatin, 5 drams. A little care is required in making the paste, to keep the gelatin and the marrow sufficiently fluid for them to be thoroughly mixed. The gelatin should be soaked in sufficient water to soften it, and then should be melted with the glycerin, the mixture being kept in a mortar previously made hot with boiling water, while in another mortar, made hot in a similar manner, the marrow and wine are mixed. Then the contents of the two mortars should be thoroughly incorporated and allowed to set.

**New Variety of Ergot.**—There has recently been received in the London market an importation of a few hundred-weights of ergot, which was grown in the Canary Islands and exported from Las Palmas. It is believed to be the first that has reached this country from those islands. In appearance it is more slender than the Russian ergot, and somewhat longer as a rule. It has been examined by J. C. Umney, who finds that it yields a larger amount of extractive than the Russian and Belgian varieties, and is quite equal to an average sample of fine Spanish ergot. A specimen of the drug has been presented to the museum of the Pharmaceutical Society of Great Britain.—*Phar. Jour.*

**Preparation of Potassium Ferricyanide.**—To a warm concentrated aqueous solution of potassium ferrocyanide C. Bech (*Zeit für angew. Chem. through Pharm. Review*) adds an aqueous solution of ammonium persulphate so that the reduction product will separate upon cooling in the form of a crystalline precipitate of potassium ammonium sulphate. One kilogram of potassium ferrocyanide is dissolved in



**Sedum Camphor.**—Hjelt has extracted from the oil of sedum palustre a sesquiterpene alcohol of the formula  $C_{15}H_{26}O$ . It presents the greatest similarity to the corresponding patchouli camphor. Weak sulphuric acid converts it into a sesquiterpene  $C_{15}H_{24}$ , boiling at 255 degrees.—*Chemiker Zeitung.*

**Distinctive Reaction for Sparteine Sulphate.**—A small quantity of the alkaloidal salt is mixed in a porcelain capsule with about one-third its weight of chromic acid and gently warmed; the mass at once turns green from the reduction of the acid and gives off a distinct odor of coniine.—*Journ. de Pharm. d'Anvers*, li., 228. *Phar. Jour.*

**Phenosuccin** has been prepared by A. Putti (*Oester. Zeit. f. Pharm.*) by the action of succinic acid on paramidophenol, and recommended by him as an antipyretic and antineuralgic. It forms colorless needles, melting at 155 degrees; difficultly soluble in cold water, a little more soluble in hot water (1 to 88), and insoluble in ether.

**Fer Cremol** is a brown, almost tasteless powder, soluble in very dilute ammonia water, with a fine red color, without residue. It contains 8 per cent. of iron. The dose is from 8 to 8 gr. three times a day, after meals. Its therapeutic indications are the same as for the large number of similar organic iron compounds recently introduced.

The insecticide efficiency of paris green depends upon the amount of arsenous acid present, which is somewhat variable, ranging from 54 to 61 per cent. In an analysis of five samples obtained in the

market the chemist of the Maine State college experiment station found 54.61, 55.89, 54.70, 55.84 and 40.86 per cent. of arsenous acid, respectively. The other constituents were not determined.

**Gilding Glass and Porcelain.**—According to a French authority, much better and more brilliant results may be obtained from the following than from the simple gold chloride ordinarily used: Mix 900 parts of lavender oil, 100 parts of gold chloride, 5 parts of bismuth subnitrate and 50 parts of chrome green; apply on the surface to be gilded, allow to dry, and then heat in a muffle furnace.

**Kosotoxin.**—This body is an active principle of Koso flowers. It is a yellowish amorphous powder, according to Leichsewring, melting at 80 degrees, to which the provisional formula  $C_{15}H_{26}O_4$  has been assigned. It is soluble in alcohol, ether and chloroform, and has a considerable physiological action. It is a strong muscle poison, but has very little action on the central nervous system.—*Apotheker Zeitung.*

**Sodium Phenosuccinate** is the sodium salt of the phenosuccin mentioned above and is prepared by the same author, A. Putti (*Oester. Zeit. f. Pharm.*), by warming succinamin with soda solution. It forms a white powder, readily soluble in water. It is to be preferred to phenosuccin itself from a therapeutic point of view, and may be administered in doses of 0.5 to 8 gm. ( $7\frac{1}{2}$  to 48 grains) as an antipyretic and antineuralgic.

**Fluorol** is a new name for sodium fluoride and has been recently recommended (*Pharm. Post*) as an antiseptic,

1 kg. of hot water and the solution allowed to cool to 60 degrees C. To this liquid a cold solution of 270 gm. of ammonium persulphate in 500 gm. of water is gradually added, the mixture being cooled at the same time. Under these conditions the potassium ammonium sulphate will crystallize, whereas the ferricyanide remains in solution. The process is patented in Germany.

Phosphergot is the generic name given to a mixture of sodium phosphate and ergot, recommended in general debility. It appears in the following three modifications: The variety intended to be taken as a mixture (in sweetened water) contains 1.5 gm. (38 grains) of sodium phosphate and 1 gm. (15 grains) of powdered ergot; this quantity constituting a daily dose. In the case of phosphergot powder, each dose represents 0.25 gm. (8 3/4 grains) each of dried sodium phosphate and powdered ergot; and this dose is intended to be taken in the morning on an empty stomach. For pills, the following proportions are used: Dried sodium phosphate and extract of ergot, of each 2 gm. (31 grains); make into 20 pills. Two to four pills to be taken daily.—*Ph. Zt. Merck's Report.*

**Preparation of Sodium Bicarbonate.**—According to E. Carthaus (*Zeit. für Ang. Chem. through Pharm. Rev.*) magnesite or dolomite can be brought into solution as magnesium bicarbonate by acting upon it with carbon dioxide and water under a pressure of 5 to 6 atmospheres, and on this fact he has based the following patented process. If this solution is acted upon by sodium chloride, also under pressure, double decomposition takes place, magnesium chloride and sodium bicarbonate being formed. The latter is largely precipitated, whereas the magnesium chloride, being very soluble, remains in solution. These reactions are repeated separately in suitable apparatus, the materials being forced under pressure from one vessel into the other until the mother liquid becomes saturated with magnesium chloride. The sodium bicarbonate is washed to remove the impurities of the mother-liquid.

**Soluble Ferments and Alcohol.**—A. Dastre shows that soluble ferments are not entirely insoluble in alcohol. (*Com. Rend. Phar. Jour.*) The digestive ferments and those of blood, taken in the dry state, are totally insoluble in strong alcohol, but it is otherwise when the alcohol is mixed with water. Trypsin was found to be very soluble in alcoholic liquor of the strength of 10 to 25 per cent., but less so in 50 per cent. and stronger solutions. The amylolytic ferment is even more soluble, dissolving in 65 per cent. alcohol. The ferments of blood are only slightly soluble, and not at all in solutions containing more than 4 or 5 per cent. of alcohol. The scale of solubility is given as follows: Diastase and proteolytic ferments of the blood, emulsin, ptyalin, trypsin, pepsin, ferment of gaultherin, amylolytic ferment of the pancreas, and myrosin. Though the ferments specially studied and referred to above may exercise their specific activity in alcoholic media, the presence of the latter is not favorable to such action.

**The Action of Mustard and Pepper on Digestion.**—In nearly all experiments dealing with the action of condiments or other like substances on digestion, the work done has been limited mainly to the influence of the substance upon the secretion of gastric juice, or to the effect

of the presence of the substance upon the purely chemical process of gastric digestion. Dr. Gottlieb of Heidelberg, however, has recently tried some interesting experiments on the influence of mustard and pepper on the secretion of pancreatic juice. The experiments were conducted on rabbits, a cannula being inserted in the pancreatic duct, after which the condiments were introduced into the stomach. The presence of either of the substances in the stomach led to a marked increase in the secretion of pancreatic juice, the volume of fluid being increased three or four times. As might be expected, the juice secreted under these conditions was somewhat more watery than normally, but showed the usual digestive properties on all three classes of foodstuffs.—*Food and Sanitation.*

**Apolysin.**—De Nencki and De Jaworski (*Presse Méd., B. M. J.*) have studied apolysin chemically, physiologically and clinically. Apolysin is really monophenetidin, being allied to phenacetin, as they are both derived from parphenetidin. The difference between them is that in phenacetin one atom of H in the amide group is replaced by the radical of acetic acid, while in apolysin the same atom of H is replaced by the radical of citric acid. It is a crystalline, yellowish-white powder of peculiar odor and taste, less acid than citric acid. Its melting point is 72 degrees C. It is soluble in cold water (1 in 25), alcohol, and glycerin, and in concentrated sulphuric acid without change of color. The solution in nitric acid turns a pale orange color in hydrochloric acid, concentrated to 1 dg. for 1 ccm. of acid, warmed and mixed with 10 volumes of water, it turns the color of burgundy wine when a few crystals of chromic acid are added. The aqueous solution is not clouded by silver nitrate, nor the acid solution by sulphide of hydrogen.

**Medicated Gelatin Bougies.**—M. J. Schröder prepares bougies with gelatin, as follows (*Ned. Tijd. Phar. Jour.*): Gelatin, 5 gm., is macerated in water, 25 gm., for a quarter of an hour. Glycerin, 5 gm., is then added, and the mixture heated until solution is complete, when the liquid is strained and again heated until it is reduced to 25 gm. If the medicament is soluble in water, it is dissolved in as little as possible, the solution added to the melted mass, and the whole heated till again reduced to 25 gm. If, however, more than 5 per cent. of the medicament be added, further evaporation of the mass should be avoided. Readily decomposable compounds should be dissolved in a known quantity of water, and that quantity evaporated from the mass before the addition takes place. Bougies containing silver nitrate can thus be obtained both transparent and colorless. When insoluble compounds are to be added, the gelatin mass should be prepared with water only, and the medicament mixed with the glycerin before mixing. Special precautions to be observed when adding alum, tannin, or ferric chloride to the gelatin mass are described by the author, but in such cases it would seem preferable to resort to the use of some other basis. A similar method of preparing the gelatin mass has been found satisfactory for preparing capsules.

**Hydrogen Peroxide.**—A very exhaustive paper on hydrogen dioxide appears in the current number of the *Berichte*, by J. W. Brühl, quoted by the *British*

*and Colonial Druggist.* He places the specific gravity of pure hydrogen dioxide as  $d_4^{20} = 1.458$ . Spring found it to be  $d_4^{20} = 1.499$ . After having distilled some of the body in vacuo an oily residue was left, which Dr. Brühl wished to examine, so he took a drop from a capsule with a glass rod, which he points out was not rounded, but broken off sharp. At the moment of contact, an explosion of such intensity occurred that Brühl describes it as "such as I have never before heard." The glass vessel was driven clean through the table. Beakers and flasks were broken, and a window 5 meters off was smashed. The ether and alcohol in the flasks which were shattered, although not near a gas flame, caught fire. The doctor's spectacle glasses were torn out of the frames, and he was struck with numerous fragments of glass, some of which went through his clothes, and stuck into his body. A complete spectroscopic examination was also made. The chief constants of hydrogen dioxide are given in the table as follows:

Boiling point.....	63° 3' — 60° 2'
Specific gravity $d_4^{20}$ .....	1.45
Specific gravity $d_4^{20}$ .....	1.48
Refractive index (sodium line).....	1.406

The paper concludes with some interesting speculations as to the constitution of hydrogen dioxide and ozone and carbon monoxide and the valency of hydrogen.

**The Active Principles of Helleborus Foetidus.**—The true Hellebore, writes M. Sauvan, especially *H. foetidus*, contain two toxic glucosides, helleborein and helleborin. Helleborein is very soluble in water, slightly soluble in alcohol, almost insoluble in ether, decomposes under the influence of weak acids into glucose and helleboretin. Helleborin is insoluble in water, slightly soluble in ether, soluble in alcohol and chloroform. Weak acids break it up into glucose and helleboretin. The author has made a microchemical examination of the plant in order to localize the active principles as far as possible. Under the influence of strong sulphuric acid, helleborein is colored a golden yellow, gradually changing to red brown. With helleborin the same reagent yields a cherry to violet color. A third non-toxic substance is present which has not been studied. The conclusions drawn are as follows: The root does not contain helleborein. Helleborin appears to be associated with the non toxic substance chiefly located in the cortical parenchyma, but even there only in small quantity. In the stem, helleborein is found in the first two or three layers of cells under the epidermis. Helleborin appears to be present in the cortical parenchyma. In the leaves, helleborein is found in the petiole, in the epidermal and sub-epidermal layers. The glucoside is most plentiful in the elements forming the concave portion of this organ. In the lamina, the same body is found chiefly in the epidermis. The seed is very rich in the active principles. Helleborein is present in the albumen and the embryo. The two other bodies are present, also, in small quantities.—*Repertoire de Pharmacie.*

The flaky, lustrous substance which forms on the sides and bottoms of bottles containing magnesia mixture (used as a reagent in the estimation of phosphoric acid) has been found to be similar to talcum in physical properties and almost identical with the mineral serpentine in chemical composition. It is a magnesium silicate.



## Investigations Into the Chemical Composition of Bismuth Subnitrate.\*

BY CHARLES O. CURTMAN, M.D., PH.D.,

St. Louis, Mo.

It is well known that by treating bismuth nitrate,  $\text{Bi}(\text{N O}_3)_3$ , with water very different products of bismuth subnitrate are obtained. The amount of water added, the temperature, the length of time the precipitate remains in contact with the liquid before filtering, the duration of washing and the quantity of water used in that operation, and finally the temperature and time of drying the finished product, all have their influence in producing salts of various compositions. Many of the precipitates are shown by the microscope to consist of minute crystals, so that they may be considered as definite chemical compounds, while some are amorphous. To secure products of uniform composition some Pharmacopoeias give careful detailed directions for the preparation, while others leave the choice of the method of preparation to the manufacturer and confine themselves to prescribing tests for purity.

### THE UNITED STATES PHARMACOPŒIA REQUIREMENTS.

The United States Pharmacopœia describes the salts as "of variable chemical composition," and its tests for purity refer to the absence of foreign metals, especially of lead, silver, copper and arsenic, carbonates, sulphate and chloride. The only quantitative tests relating to the proportion of its normal constituents are implied in the description of the salt, which states that when heated to 120 degrees C. it loses water (from 8 to 5 per cent. of its weight), and when subsequently heated to redness it leaves from 79 to 82 per cent. of its weight of a yellow residue. Hence when a salt complies with the tests for absence of foreign materials, a considerable limit is allowed in the relative proportion of nitrate, hydroxide and water.

The larger modern works on chemistry give numerous different formulæ found by recent and older investigators for bismuth subnitrate, together with the conditions under which their formation was observed. Thus Dammer's "Handbook" enumerates nine varieties, Michaelis seven, and in Flückiger's "Pharmaceutical Chemistry" we find three principal formulæ distinguished as  $\alpha$ ,  $\beta$  and  $\gamma$ .

### COMPOSITION OF THE COMMERCIAL NITRATE.

For some time past I had observed that of several specimens received for examination, none corresponded exactly to the proportions demanded by and of the formulæ published, most of them being deficient in acid. Few came within the limits of quantitative proportions stated in the United States Pharmacopœia, which are the same as those of the German *Arzneibuch*, although on qualitative examination they complied with its demands. Of course the mistake of using tinfoil in Bettendorf's test for arsenic, to which I called attention about two years ago,† was avoided, the concentrated solution of stannous chloride being

used alone. For the purpose of investigating the subject more fully I procured specimens from some of the principal manufacturers, and determined in them not only the freedom from impurities, but also the loss of water by heating to 120 degrees C., and the amount of residue of bismuth trioxide left on ignition, and lastly the percentage of nitric acid. To facilitate the comparison of results I give the proportions demanded by Flückiger's formulæ. These are: ( $\alpha$ )  $\text{Bi O N O}_3 + \text{H}_2\text{O}$  (or as written by others:  $\text{Bi}(\text{O H}), \text{N O}_3$ ) representing the salt as first precipitated. ( $\beta$ )  $\text{Bi O O H} + \text{Bi O N O}_3$ , the same salt after protracted washing. ( $\gamma$ )  $(\text{Bi O N O}_3)_2 + \text{H}_2\text{O}$ , the salt formed by long contact with acid wash water. Also that of a formula containing the salt ( $\beta$ ) with water: ( $\delta$ )  $\text{Bi O O H} + \text{Bi O N O}_3 + \text{H}_2\text{O}$ . Other published formulæ demand a still larger proportion of nitric acid and need not be considered here.

These four contain as follows:

Per cent. of water lost at 120°C.	Per cent. of $\text{Bi}_2\text{O}_3$ after ignition.	Per cent. of nitric acid radical, $\text{NO}_3$ .
$\alpha = 5.894$	76.413	20.311
$\beta = \dots$	88.101	11.709
$\gamma = 1.54$	80.800	21.247
$\delta = 8.286$	85.208	11.324

The seven specimens examined were all exceedingly light and voluminous, and would pass muster in regard to the qualitative tests of the U. S. P.

	Per cent. of loss at 120°C.	Per cent. of residue $\text{Bi}_2\text{O}_3$ .	Per cent. of acid radical, $\text{NO}_3$ .
1.....	4.1	82.0	10.80
2.....	5.9	82.5	11.45
3.....	5.8	83.1	10.21
4.....	3.2	85.0	9.90
5.....	3.1	81.2	10.53
6.....	3.0	82.0	11.45
7.....	3.2	81.1	10.53

For the determination of the nitric acid several volumetric methods were tried on the same sample, and after finding that they gave substantially equal results and agreed well with some colorimetric tests, the following was adopted as the most expeditious for the examinations: 6.189 gm. (corresponding to the molecular value of the acid radical  $\text{NO}_3$ ) of the bismuth salt were suspended in 100 ccm. of water at ordinary temperature, a few drops of phenolphthalein T. S. were added, and then normal solution of potassium hydroxide, in small portions, with vigorous shaking, until the red color remained permanent for ten minutes. The number of cubic centimeters of normal solution used directly indicated the percentage of  $\text{NO}_3$ . (If only 1 gm. be taken, the number of cubic centimeters of solution used must be multiplied by 6.189 to obtain the percentage of  $\text{NO}_3$ .)

The results show that Nos. 2, 3 and 4 exceed the limit of residue of  $\text{Bi}_2\text{O}_3$  given in the U. S. P. (and in the German *Arzneibuch*); also that Nos. 2 and 3 lose more water than prescribed. The water lost at that temperature is the more loosely combined water of crystallization, while the separation of the water formed from the hydroxide requires a higher temperature.

### THE COMMERCIAL SALT A MIXTURE.

The specimens examined are nearly all more basic than is demanded by the four formulæ above given. All of the other formulæ enumerated in the books require still more acid. So that we must either consider our commercial products as having more basic formulæ, or else that they are mixtures in indefinite proportions of bismuth hydroxide with the real subnitrate

The latter is most likely the correct view. For the calculation of the actual proportions leads to formulæ of such complexity that it is not likely that they have any existence in fact. The crystalline appearance under the microscope does not necessarily indicate that we have a single salt, but may be due to successive crystalline deposits of salts of different composition, varying in proportion according to the different methods of manufacture.

Clinical experience with these more basic preparations can alone decide whether they are sufficiently useful to recognize them by enlarging the pharmacopœial limits, so as to include them in the official standard.

While experimenting with the above and other specimens I experienced a difficulty that may be of sufficient interest to mention. One of the tests prescribed in the U. S. P. not only for bismuth but also for several other metallic salts, directs that after precipitating all of the metal by hydrogen sulphide from acid solution, the filtrate should leave no residue on evaporation. During the continued drought of last summer the atmosphere in my surroundings so abounded in very fine dust that it was impossible to evaporate even the purest distilled water or alcohol without leaving a very small residue. After heating over the Bunsen flame on platinum foil they invariably left a very slight yet distinctly visible ring on the polished surface. All of the specimens tested left a similar trace of residue. Having found that this did not necessarily indicate an impurity in the salt, but was due to atmospheric conditions, I disregarded it. On repeating the evaporation during a spell of wet weather, a drop of the same liquid left no stain behind.

### New Method of Estimating Mercury in the Urine.

Dr. Adolf Jolles (*Univ. Med. Jour.*) advises the following method of making a quantitative analysis of the urine for mercury: Powdered gold, specially prepared in order to give it the highest possible amalgamating power, is added in the proportion of 2 gm. (81 gr.) to from 100 to 300 ccm. ( $8\frac{1}{2}$  to  $9\frac{1}{2}$  fl. ozs.) of urine and from 1 to 8 ccm. (15 to 46 minims) of concentrated hydrochloric acid. The mixture is heated and from 2 to 8 cm. (31 to 46 minims) of chloride of tin, freshly prepared, is added. If a flaky precipitate of hydrated oxide of tin is produced, too little hydrochloric acid has been used—an error which is easily corrected. The liquid is heated to 70 or 80 degrees C. (158 or 178 degrees F.), and from 30 to 50 ccm. (1 to  $1\frac{1}{4}$  fl. ozs.) of the chloride of tin solution added, stirring in the meanwhile. The mixture is heated and stirred for five minutes longer and left to stand for several minutes. The liquid above the amalgam is poured out and the latter washed several times with distilled water until the reaction of chlorine is no longer obtained from the water. Three or four drops of a hot concentrated solution of nitric acid is added to the purified amalgam, several drops of water poured on, and finally an equal quantity of chloride of tin. The amalgam and the gold are then weighed separately, after having removed the mercury. According to Dr. Jolles, the test is not as costly as it might appear, as the gold can be used for a number of analyses.

\* Report No. 9 of Research Committee B of the Committee on Revision of the Pharmacopœia. Communicated by the author.

† See the AMERICAN DRUGGIST and PHARMACEUTICAL RECORD XXV, p. 10.

## WRINKLES IN DISPENSING.

At a meeting of the Glasgow and West of Scotland Pharmaceutical Association, held recently, a member submitted notes upon the three following points:

## CREOSOTE INCOMPATIBLE WITH CAMPHOR.

Creosote.....	gr. i
Quin. disulph.....	gr. i
P. camph.....	gr. i
Aloin.....	gr. ss
Ext. bellad. alch.....	gr. 1-24
Strychnine.....	gr. 1-64

M. ft. pil. mitte 48 tales.

All the ingredients except the creosote were mixed together, and then creosote pill-mass added. The combination immediately assumed the consistence of very soft soap. The addition of an equal quantity of absorbent powder, consisting of liquorice powder 2 parts and tragacanth powder 1 part, still left it like soft putty. Camphor and creosote—like camphor and carbolic acid—seemed to be incompatible.

## AN IMPURE SALT.

The impure salt was bismuth. subcarb., and the impurity (ammonium nitrate) was discovered accidentally when dispensing a recipe containing pot. bicarb. and bismuth. subcarb. On triturating these in a mortar a strong smell of ammonia made itself felt. Fifty grains of the bismuth. subcarb. were washed with water, and the filtrate gently evaporated to dryness. No visible residue was left, but on washing the evaporating basin with a dram of water and dropping in sulphate of indigo solution, it was instantly decolorized. The author did not repeat the experiment so as to estimate the amount of admixture, which was more than appreciable, as, after putting in 80 drops of indigo solution, the mixture was still clear.

## A BAD OINTMENT DILUENT.

The bad ointment diluent was *paraffinum molle*. They had heard a good deal lately about carbolic acid and other medicaments, which had been incorporated with it not remaining so. In the early part of the summer he made some diluted nitrate of mercury ointment, petrolatum U. S. P., being used. After the recent heat wave he found that separation had taken place, the bottom of the pot being surrounded by a ring of transparent matter, having the color and consistence of syrup. The U. S. P., after describing the process by which the soft paraffins of commerce are obtained, said: "The clearer portion of the filtrate is then brought to the proper melting point, if necessary, by the addition of pure block paraffin, which dissolves perfectly in the warm liquid oil." [The U. S. P. does not describe the process by which soft paraffins are obtained, at least not in this way. The author of the paper has evidently confused the U. S. Pharmacopoeia with the U. S. Dispensatory. Ed.] Probably that might account for the separation, while it was another illustration of the unsuitableness of *paraffinum molle* as an ointment base, and also seemed to demonstrate that a compound composed of ingredients having different melting points did not acquire a melting point which was the mean of the whole, but that fractional separation might occur when a very gradually increased temperature was maintained for some time, with periods of cooling inter-

vening, the result being practically distillation *per decensum*. The U. S. P. said: "When petrolatum is ordered without specifying its melting point, the low melting variety which liquefies at 40 degrees C. (104 degrees F.), is to be dispensed." [This statement refers to the Pharmacopoeia of 1890, which is obsolete. Ed.] Seeing the higher melting points were artificially produced, would it not be better to fix the melting point at 40 degrees C., and allow the physician and pharmacist to add block paraffin as required? [The author's whole argument is without point, seeing that it is based on Pharmacopoeia statements which no longer apply to the article under discussion. Our Glasgow brethren should invest in a copy of the 1890 Pharmacopoeia. Ed.] A range of 11 degrees C. (40-51 degrees) in the melting point seemed too wide, more especially as they could all be said to be prepared according to the standard. B. P. *paraffinum molle* with a range of 10 degrees F., would be (95-105 degrees) less open to objection did it not include petrolatum as a synonym.

## NOTES ON GLYCERIN SUPPOSITORIES.

A member said the B. P. strengths made according to the recipe in "Squire" were of the same strength, without the troublesome evaporating down process, were soluble in the mouth, but the toughness depended upon the quality of the gelatin.

## With Agar-Agar, 50 Per Cent.

The *Year-Book of Pharmacy*, 1895, gave a formula for this from a French source, and it was claimed that the result gave a more transparent mass, which did not stick to the mold nor clot, and produced a more elegant article when finished. The specimens he exhibited were made that day, and already a good quantity of glycerin had leaked from them, and, most fatal objection of all, they would not melt at blood temperature.

## With Sodium Stearate, 95 Per Cent.

This suppository, for which an American formula was given in the *Year-Book of Pharmacy*, 1894,\* had attracted considerable attention on account of the large quantity of glycerin contained, and had been put on the market by an American firm of druggists in small bottles of five each. Stearic acid was gently melted in glycerin, and enough carbonate of soda added to make neutral. The operation required care, and the result was a clear transparent mass, forming, when melted and cast into molds, a very pretty suppository, but highly hygroscopic and requiring to be put into air tight bottles as soon as made. These suppositories melted very slowly in the mouth, and he was of opinion that in point of efficiency the B. P. article was superior to the others on account of its lower melting point.

## DISPENSING QUERIES.

The subjoined notes on dispensing queries were communicated to the Edinburgh Chemists' Assistants' and Apprentices' Association, December 18, by William Duncan.

In the following prescription, the whole of the menthol, on addition of the spirituous tincture, collected and formed a cake on the top of the liquid:

\*AMERICAN DRUGGIST, XXIV, p. 34.

## SEPARATION OF MENTHOL INGENIOUSLY AVOIDED.

Tinct. iodl.....	3v
Menthol.....	3iss
Glycerini.....	3j
Aque, ad.....	3iv

A suitable mixture was obtained by dissolving the iodine and potassium iodide in the water, then reducing the menthol to powder and rubbing it up with the glycerin, and then adding the rectified spirit of the tincture last.

## CRYSTALLIZATION IN A MIXTURE.

In the case of the following prescription, the lithium carbonate and potassium bicarbonate crystallized out on standing:

Tinct. strophanthi.....	3v
Lithil. carb.....	gr. ij
Potass bicarb.....	gr. xv
Sp. ammon. aromat.....	3j
Aque, ad.....	3ss

The crystallization was due to the large quantity of alcohol present, and could only be avoided by increasing the quantity of water.

## QUININE AND HYDROBROMIC ACID REACTION.

In the following instance complaint was made that the mixture became muddy from separation of a crystalline precipitate:

Quin sulph.....	3j
Glycerini.....	3iv

Add acid. hydrobrom, q. s. to dissolve the quinine.

If acid. hydrobrom. dil. B. P. is used, the solution is quite clear. The muddiness was found to be due to the use of the acid. hydrobrom. made by Fothergill's process from potassium bromide and tartaric acid, with consequent separation of quinine tartrate.

## HYDRATION OF BORGLYCERIDE AND FORMATION OF CRYSTALS.

The following lotion on standing soon deposited crystals:

Boroglyceride.....	3j
Glycerini.....	3j
Lot. hydrarg. perchlor. (gr. 1-6 to 3j) ...	3vj

The crystals were boric acid, formed by hydration of the boroglyceride. This could not be avoided, and the mixture was, therefore, incompatible.

In the next prescription there was separation of a flocculent precipitate, and the question to be answered was whether, and if so, when, the precipitate should be filtered out. Mr. Duncan said if it was to be filtered it should be done before addition of the liquor strychnine, to avoid possible loss of alkaloid. He thought it was always permissible to filter such mixtures for the sake of appearance, provided there was no loss thereby of active ingredients.

## Some Cosmetic Formulas.

## BRILLANTINE.

[Der Seifenfabrikant.]

## VIOLET.

Olive oil.....	22 ounces
Candle oil.....	5 ounces
Violet extract.....	7 ounces
Orange extract.....	1 ounce
Orris essence.....	16 grains

## HELIOTROPE.

Olive oil.....	22 ounces
Jasmine oil.....	2 ounces
Tincture of vanilla.....	7 ounces
Tincture of tonka.....	1 ounce
Bergamot oil.....	160 grains
Geranium oil.....	24 grains
Cedarwood oil.....	24 grains
Clove oil.....	20 grains
Heliotropin.....	16 grains
Vanillin.....	24 grains

**Distilled Water.\***

BY J. U. LLOYD,†

Cincinnati.

It has been found that, by means of a stone condenser, ordinary Ohio River water could be employed to make distilled water that would stand the requirements of the U. S. P. concerning organic matter.

**INORGANIC MATTER.**

It was also found that, by means of evaporation in platinum, this water left visible rings of inorganic matter. On determining the amount of this matter, it was found that 100,000 ccm. left 1.8 gm. of residue, which proved to be dissolved stone, and constant. Tucker‡ gives the following limits of observed residues with glass condensers:

100,000 parts of water left from 2.20 to 28.00 parts of residue. In this connection it may be stated that glass, tin, stone and aluminum condensers all leave residues, which, as Prof. T. H. Norton is investigating the subject, will not be considered in detail here.

**KEEPING QUALITIES OF DISTILLED WATER.**

In this direction, the question presenting itself is as to what length of time, under ordinary shop conditions, distilled water may be kept. While it is evident that in securely sealed bottles no change can occur to alter the organic constituents, still, in bottles drawn from in the course of business, the question of increasing organic contamination is pertinent.

March 4th, two 5-pint glass-stoppered bottles were filled with water fresh from the still.

A was closed with the glass stopper, loosely covered with a cap of parchment paper, and was successively tested: March 6th, 7th, 11th, 27th, April 4th, 15th, May 16th, June 12th, August 23d and December 8d.

Each time, of course, the usual atmosphere replaced the abstracted liquid, but the water stood the test in all instances; in the last examination, the pinkish tint faded considerably upon ten minutes' boiling, but was still apparent the following day.

B was provided with a cork stopper, having two perforations, through which were inserted a thistle tube containing sulphuric acid and a siphon tube with stop-cock. A plug of absorbent cotton was placed in the funnel of the thistle tube.

This precautionary experiment was probably unnecessary as shown by the result of A; however, the water was tested March 7th, 11th, April 4th, 15th, May 16th, June 12th and December 4th, without evidence of material change.

It was noticed that the pinkish tint faded less than in the case of A, hence it is manifest that distilled water kept in a bottle protected as before described deteriorates less than under ordinary precautions.

Another series of tests was made of distilled water kept in smaller bottles, as follows:

\* Read at a meeting of the Philadelphia College of Pharmacy.

† The author extends his thanks to Dr. Sigmund Waldbott for assistance in details of this work.

‡ The Adulteration of Drugs. A lecture delivered before the Department of Chemistry of the Brooklyn Institute of Arts and Sciences, May 24, 1895, by Willis G. Tucker, and summarized in the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD for June 10, 1895.

March 15th, 14 glass-stoppered quart bottles, perfectly clean, were filled successively from the still, with water that stood the permanganate test of the U. S. P. A paper cone was inverted over the neck of each bottle, the intention being to examine the bottles successively each month. They were placed on a shelf in the laboratory.

Bottle I was further tested April 15th, May 16th, June 17th, August 23d and December 4th. The last portion stood the permanganate test perfectly, and this notwithstanding the fact that flakes had collected at the bottom of the bottle.

As the first bottle opened gave no evidence of organic change, it might have been deemed unnecessary to disturb all of the 14 sample specimens. Still, a few more were opened, as all of them contained a flaky sediment.

The following results were obtained:

II stood the test March 14th, August 23d and December 4th.

III and IV March 14th and December 4th.

V was examined with a view of determining how distilled water would keep in a bottle loosely covered with tissue paper only.

Water, distilled March 4th and contained in a glass-stoppered bottle, stood the test March 14th and June 17th. The stopper being removed, the mouth of the bottle was now loosely covered with tissue paper and the bottle placed on a shelf in the laboratory and tested again August 23d. It stood the test very well, but a sort of scum, resembling a fungus growth, had collected on top of the water. At the date of writing this (December 4th) the quantity of scum has increased, and a sediment has also formed. The clear intermediate liquid, withdrawn by means of a clean pipette, stands the permanganate test very well; but another portion, into which some of the large flakes were introduced purposely, was gradually decolorized by ten minutes' boiling. These flakes, however, which appear identical in their nature with those to be found in each of the 14 closed quart bottles, consist of inorganic material for the most part, but also contain organic matter, as incineration or treatment with sulphuric acid will demonstrate. Whether the inorganic portion of these flakes is only the inorganic matter which is held in solution by the distilled water, or whether they are due partly to some corroding influence exerted by the water upon the substance of the glass, is a point that was not determined in these experiments.

In now comparing the keeping qualities of distilled water, it is manifest, as shown by these experiments, that water remains almost unimpaired with regard to the permanganate test of the U. S. P. during a period of several months, and probably will stand much longer if the water is contained in quart bottles, even though it be withdrawn in parts at intervals. In larger bottles, say of five pints, the water gradually deteriorates during a period of several months if no special precautions are taken to purify the air entering in the place of the water withdrawn from the bottle.

During the examinations it was found that, in the presence of tobacco smoke, and also the vapor of nicotine in the air of the laboratory, the permanganate test was inoperative, the same being true in the presence of iodine vapors. Upon carrying the same quality of water to localities free from such contaminations it stood the permanganate reaction, thus

showing that the tests should not be made in the presence of certain atmospheric impurities.

From the results of previous investigations it was seen that with suitable apparatus distilled water, to withstand the rigid organic test of the U. S. P., may be obtained direct from ordinary river water. In this connection it may be stated that the same good results have followed with water distilled during the entire season, both in summer and in winter.

Contrary to the preconceived opinion of the writer, no organic disturbance results in such water during the usual time that would be employed in emptying a medium sized container. Under ordinary conditions, and without special precaution, it can be used for dispensing purposes with confidence.

In applying the permanganate test the condition of the atmosphere might lead to incorrect conclusions concerning the water.

All distilled water encountered to date contains inorganic matter in solution, enough, under the conditions named in this paper, to deposit a sediment in time. This sediment also holds organic matter as an invariable constituent, which it seems difficult to exclude entirely in the making and keeping of the distilled water. Still the amount contained in the latter is so small that it does not perceptibly interfere with the permanganate test.

**CONCLUSION.**

1. It is impractical (by reason of inorganic impurity) to make distilled water in glass, stone or ordinary metal condensers that will stand the pharmacopoeial test.

"When 1,000 ccm. of distilled water are evaporated on a water bath to dryness, no residue should remain."—U. S. P.

2. The pharmacopoeial test (permanganate) for organic impurities is not too rigid.

3. Precautions should be given in the Pharmacopoeia that the permanganate test be not applied in a very impure atmosphere.

4. If the neck of the bottle be protected with an inverted paper cap or other cover, and the operator is careful not to touch the lip of the bottle with his hand, the water will retain its purity and the Pharmacopoeia can demand that distilled water used for dispensing withstand the present test for organic matter.

**ASTHMA IN CANARIES.**

[Chemist and Druggist].

Tincture of cayenne.....	3 j
Spirit of chloroform.....	3 i
Ammonia citrate of iron.....	3 j
Fennel water to.....	3 vj

A few drops to be put on a lump of sugar in the cage daily.

**SALOL DENTIFRICE.**

Salol.....	3 liiss
Saccharin.....	gr. xij
Water.....	3 ss
Oil of peppermint.....	3 j
Oil of anise.....	℥v
Oil of fennel.....	℥v
Oil of cloves.....	℥ij
Oil of cinnamon.....	℥ij
Alcohol to.....	3 vj

Mix.

For a tooth powder use cretæ præcip. § xij in place of alcohol.

## Prescription Statistics.

From the tabulation of 10,000 prescriptions, made for the Committee on Revision of the U. S. Pharmacopoeia of the Illinois Pharmaceutical Association, the following summary has been made by C. S. N. Hallberg, who communicates it to the *Western Druggist*. While a larger number has been tabulated a summary is more easily comprehended when based on an even decimal number; thus 100 would represent 1 per cent. of 10,000, and the percentage proportion of each article to the whole number is seen at a glance from the number of times the article has been used. The summary represents one report on 2,000 and eight reports on 8,000 prescriptions, nearly equally divided between Chicago and the interior of the State of Illinois. The following is a list of the items most largely used, alphabetically arranged:

## DRUGS USED IN 10,000 PRESCRIPTIONS AND FREQUENCY OF USE.

Acid, boric.....	191
" carbolic.....	162
" salicylic.....	64
" tannic.....	26
Aconite, tincture.....	266
Ammonium, chloride.....	325
Antikamnia, proprietary.....	257
Antipyrin, proprietary.....	115
Belladonna, extract.....	59
" tincture.....	87
Bismuth subnitrate.....	465
Cascara sagrada, fluid extract.....	68
" aromatic, proprietary.....	59
Chloral hydrate.....	75
Chloroform.....	87
" spirit.....	73
Cinchona, tincture, comp.....	72
Cinchonidine, all salts.....	43
Cocaine hydrochlorate.....	69
Cocaine, all salts of.....	121
Copaiba, tincture.....	73
Digitalis, tincture.....	188
" all other preparations.....	59
Elixir calisaya.....	145
" iron, quinine and strychnine.....	62
" lactopeptine.....	106
Ergot, fluid extract.....	120
" all other preparations.....	33
Ether, nitrous, spirit.....	252
Gentian, tincture, comp.....	79
" all other preparations.....	110
Ginger syrup.....	66
" other preparations.....	34
Glycyrrhiza, syrup.....	138
" all other preparations.....	117
Hydrastis, Lloyd's proprietary.....	48
" all salts of.....	15
" other preparations.....	63
Hyocyanus, tincture.....	69
" extract.....	89
" other forms.....	39
Hydrogen peroxide.....	50
" other preparations.....	3
Iodine, tincture.....	71
" other preparations.....	48
Iodoform.....	38
Ipecac, syrup.....	259
" other forms.....	115
Iron chloride, tincture.....	205
" iodide, syrup.....	48
" other preparations.....	190
Lactopeptine, proprietary.....	95
Lanoline.....	47
Listerine.....	115
Malt extract combinations, proprietary.....	87
Menthol.....	45
Mercury, comp. and prep's, not classified.....	148
" corrosive chloride.....	120
" mild chloride.....	350
Mercury, mass, pill.....	73
" ointment.....	33
Morphine sulphate.....	400
" all other salts and prep's.....	45
Nux vomica, extract.....	171
" tincture.....	268
" other forms.....	33
Opium powder.....	92
" Dover's.....	150
" extract.....	68
" tincture.....	173
" deod.....	92
" camph.....	464
" other preparations.....	12
Orange, syrup.....	156
Phenacetin.....	241
Pancrastin.....	11
" proprietary preparations.....	87
Pepsin, saccharated.....	38
" scale.....	87
" essence.....	126
" proprietary preparation.....	123

Podophyllum resin.....	58
" other preparations.....	6
Potassium arsenite solution.....	120
" bromide.....	215
" chlorate.....	230
" iodide.....	262
Quinine sulphate.....	800
" hydrochlorate.....	37
" all other salts.....	140
Roscorin.....	39
Rhubarb, aromatic syrup.....	82
" other preparations.....	128
Salol.....	271
Sarsaparilla, compound syrup.....	70
" other preparations.....	80
Senega syrup.....	72
Senna, all preparations.....	18
Soap liniment.....	50
Sodium, borate.....	70
" bicarbonate.....	355
" salicylate.....	265
Squill, syrup.....	125
" comp.....	167
" other preparations.....	32
Strophanthus, tincture.....	24
Strychnine sulphate.....	110
" all other salts.....	22
Sulphonal.....	58
Syrup hypophosphites.....	42
" proprietary prepara- tions.....	97
Tolu syrup.....	345
" other preparations.....	3
Turpentine, oil.....	54
Vaseline.....	174
" other forms.....	10
Veratrum viride, tincture.....	59
Viburnum comp., proprietary.....	37
Water, peppermint.....	200
" fennel.....	90
" rose.....	65
" anise.....	120
" cinnamon.....	100
" cherry laurel.....	100
Wild cherry, syrup.....	155
Yerba santa, syrup.....	40
" other forms.....	8
Zinc oxide, ointment.....	55
" sulphate.....	125
" sulphocarbonate.....	65

## PROPRIETARY ARTICLES IN 10,000 PRESCRIPTIONS AND FREQUENCY OF USE.

Proprietary articles were used 2,618 times in the 10,000 prescriptions. But a small proportion of these were used in combination with other medicines, so that it may safely be asserted that 25 per cent. of the prescriptions were made up of proprietary articles. Estimated on the basis of cost these 25 per cent. would, no doubt, represent fully 50 per cent. of the total cost to the dispensers of the 10,000 prescriptions. They may be classified as follows:

1. Antiperiodics, etc.....	327
2. Antiseptics, solutions, etc.....	248
3. Hypnotics.....	13
4. Ointment vehicles.....	252
5. Cod liver oil preparations.....	28
6. Digestive ferments: Pancrastin.....	55
Pepsin.....	72
Lactopeptine preparations.....	345
7. Miscellaneous liquid preparations.....	773
Total.....	2,618

The following are the preparations in detail and the frequency of their designation in 10,000 prescriptions:

1. Acetanilid*.....	118
" comp.....	3
Antifebrin.....	100
Antikamnia.....	257
Antipyrin.....	115
Exalgin.....	1
Febriline.....	8
Lactophenin.....	7
Phenacetin.....	282
Quinine, cincho.....	6
" dextro.....	11
" phosphomuriate.....	18
Quinquina.....	8
Salipyrin.....	2
Salol.....	271
Salophen.....	12
Trional.....	18
2. Alumol.....	1
Aristol.....	62
Benzoinol.....	4
Borolyptol.....	1
Creolin.....	2
Dermatol.....	5
Europen.....	1
Ichthyol.....	40
Iodol.....	14
Napthol, beta*.....	10
" benzo.....	3

Listerine.....	115
3. Chloralamid.....	9
Chloramine.....	1
Diuretine.....	2
Urethane.....	1
4. Vaseline.....	174
Albolene.....	23
Blancoline.....	3
Petrolatum*.....	22
" carbolized*.....	2
Saxoline.....	1
Lanolin.....	47
Mollin.....	2
Unguentine.....	3
5. Cod liver oil emulsions: Scott's.....	9
Wampole's.....	18
Phillips'.....	1
6. Pancrastin*.....	11
Pancropepsin.....	23
Pancrobiline.....	1
Papoid.....	21
Panopeptine.....	5
Pepsin*.....	125
" solution, arom*.....	85
" essence*.....	126
" essence, Fairchild's.....	53
" cordial, P. D. & Co.....	19
Ingluvin.....	26
Peptensyme.....	16
" elixir.....	24
Lactopeptine.....	95
" elixir.....	168
Elixir maltopapsin.....	10
" peptonated, Fizzall.....	8
7. " miscellaneous: Acid phenique, syrup, Declat.....	1
" hydriodic syrup, Gardner's.....	8
Arsenaro.....	2
Asparoline.....	2
Bromidia.....	18
Bromides, Peacock's.....	17
Bromo-caffeine.....	3
Cactina pellets.....	11
Calisaya cordial, Tilden's.....	2
Calisaya La Billa.....	2
Cascara sagrada, cordials.....	59
Celerina.....	22
Dioburnia.....	1
Dephtherine.....	3
Elixir three bromides.....	2
" three chlorides.....	15
" three iodides.....	5
" nutrans.....	6
" phosphates, Wheeler.....	14
Ergotole.....	2
Firwein.....	26
Freigh's tonic.....	5
Glycerite kephaline.....	1
Glycozone.....	2
Glycophenique.....	9
Hemo-cardiacine.....	2
Hydrastis, fluid.....	87
" colorless, Lloyd's.....	48
Hydroleine.....	5
Kola cardinette.....	3
Liquor sedans.....	2
Magnesia milk.....	6
Malt extracts.....	23
Maltine and preparations.....	24
Liquid bread.....	1
Manganese, ferro-peptonate.....	11
Neuroline.....	5
Opium, elixir.....	6
Papine.....	27
Pepto-mangan, Gude.....	17
Peptonoids, liquid.....	29
" creosote.....	18
Phospho-albumen.....	2
Phytoline.....	2
Pinus canadense, ext.....	15
Pulv. salini.....	20
Sandal oil, Midy's.....	15
Sennetto.....	22
Sarsaparilla, Guyssott's.....	4
Succus alterans.....	3
Syrup of fig.....	1
" hypophosphites.....	5
" " Fellow's.....	62
" " McArthur's.....	22
" " Wampole's.....	8
" iron chloride, Weld's.....	1
" roborans.....	2
Tongaline.....	17
Tricine.....	8
Uterine tonic.....	5
Viburnum compound.....	22
Viburnum.....	4
Wine cod liver oil.....	15
" Mariani.....	8
Yerbazine.....	5

The consumption of proprietary articles as compared with the non-proprietary, though, as stated, about 25 per cent. in volume, is probably not less than 50 per cent. in value.

It may be well to remember that the large percentage of proprietary preparations specified in physicians' prescriptions disclosed by the above does not represent the full percentage actually sold by retail-

\*Introduced for comparison but not included in the totals.



ers in that a large part of the demand comes direct from consumers without the aid of a prescription. What caters to the ease of the physician in the way of ready-made medicines with a proprietary title also caters to the ease of the patient in obtaining supplies without the doctor's advice and without the accompanying fee. How large a percentage of the proprietaries consumed by direct self-medication is to be added to the above consumed on prescription orders in order to arrive at the total consumption is necessarily conjectural, though undoubtedly large, as the experience of the average druggist will attest.

### A Fluorescent Constituent of Calumba.\*

BY ALEXANDER GUNN, F.C.S.

There are probably few pharmacists who have not experienced the difficulty of obtaining fluid preparations of calumba in a brilliant condition. Whether tincture, fluid extract or infusion, it is found to be a matter of impossibility to remove the turbid appearance by any mode of filtration.

In dealing with concentrated liquid preparations of calumba the difficulty is accentuated, the appearance of such preparations being frequently akin to that of pea soup. Careful observers may, however, have noticed that such solutions, when examined by transmitted light, are perfectly translucent and that there is evidently no trace of solid matter in suspension.

The firm with which I am connected frequently receives complaints from pharmacists of the turbidity of its calumba preparations, and occasionally the preparation itself is returned as "unfit for use." When it is pointed out that the turbidity is only apparent, and that the opalescence is due to phenomena of optical interference, the explanation is accepted with more or less hesitation, and it appears desirable that some positive evidence should be obtained to prove the correctness of the theory. During the last fortnight I have been engaged in investigating the matter, with results sufficiently encouraging to induce further research.

To demonstrate in a striking and simple manner that calumba contains a fluorescent body, half fill a test tube with B. P. tincture of calumba. Examine this by reflected light, and it will be seen that there is a fluorescence of a pronounced green tint. Add now a few drops of liquid potasse, and again observe by reflected light; the fluorescence now is of a velvety deep blue or violet color.

Although I have not at present been able to obtain the fluorescent constituents in a sufficiently pure condition to ascertain its nature, I have found the following plan successful in partially separating it from the coloring matter of the tincture:

Take 50 ccm. of the tincture and acidify with 5 ccm. dilute hydrochloric acid. Shake with a sufficient quantity of ether to form a distinct layer on separating. The yellow ethereal solution is shaken with purified animal charcoal during a quarter of an hour and then filtered. The filtrate is now gently shaken with a 1 per cent. solution of ammonia in water. There is a floccy precipitate

thrown out of the ammoniacal solution, but on filtration the fluorescence will show up beautifully.

In order to isolate the fluorescent body and to ascertain its composition I take a strong proof spirit percolate of calumba (say of such a strength that 1 = 1), mix with about three times its volume of distilled water, and stir in some magnes. calc. and kieselguhr, which help, although imperfectly, to remove something that interferes with the proper extraction of the fluorescent body. Allow to stand for a day or so, shaking up occasionally, and then filter; add about an equal volume of dilute sulphuric acid, shake with ether and separate the ethereal liquor, which is of a slightly yellow color. The acid liquid will then be free from fluorescence. The ethereal solution when shaken with ammoniacal water yields the fluorescence to the latter.

I cannot imagine that this fluorescence is due to any already known constituent of calumba. Such a property as fluorescence in an isolated body is, one would suppose, too obvious to be overlooked.

### Some Observations Regarding Kola Nuts.\*

BY ALFRED R. L. DOHME AND HERMANN ENGELHARDT,  
Baltimore, Md.

The kola nut (*Cola Acuminata*) originally was obtained exclusively from Africa, principally from the country south of Abyssinia, where, too, another caffeine-yielding plant, the well-known coffee bean (*Coffea Arabica*) is indigenous. As this drug has become so well known and popular recently, and as its properties and a description of its botany, chemistry, pharmacognosy and pharmacology have become generally known among pharmacists, a repetition of these will be unnecessary here. From most parts of Northern Africa considerable quantities are shipped, principally from Sierra Leone, Gambia, Kano and Timbuctoo. The most highly prized varieties are those raised in Kong and the Mandingo lands, although it has been customary to assume that the kola nuts from Jamaica are the most desirable. The Jamaica nuts are unquestionably larger and handsomer in appearance, but it has often been shown that the handsomest and boldest varieties or parts of the plant are not the most valuable medicinally.

We know that the virtue of a drug depends upon one or more ingredients, and the criterion, hence, for a medicinally active and desirable drug, is the amount of active ingredient that it contains, as determined by assay. It is, of course, desirable and expedient that the U. S. P. should give processes of assay for all drugs that contain active principles, and then establish a certain percentage of active principle as a standard for each drug. This, it appears to the writers, is one of the foremost problems that should confront and occupy the attention of the Committee on Revision of the U. S. Pharmacopoeia.

The problem, Which is the most desirable variety of kola nut, in so far as it contains the most caffeine? has several times presented itself to the writers, and it was a question if West India kola nuts were actually worth 25 per cent. more than African nuts. It has been pretty

well established that all that possesses any value in kola nut is the caffeine, for the analysis of Schlotterbeck and Knox\* brings to light nothing else that might be considered of value medicinally, for 8 per cent. of tannic acid, 4 of sugar and 85 of starch, can hardly be given any medicinal value. Atfield† found that kola nuts contain 2 per cent. caffeine, whereas Heckel and Schlagdenhauffen‡ obtained as much as 2.8 per cent. caffeine, and, besides this, theobromine, 0.028 per cent.; fats, 0.5 per cent.; tannic acid, 1.59 per cent.; starch, 88.7 per cent. Schlotterbeck and Knox obtained practically the same figures as these, but none of these investigators state whether they used West Indian or African kola nuts. Good typical samples of both these varieties of kola nuts in the dry state were procured from reliable sources. The African nuts were not prepossessing in appearance, being smaller and darker than the Jamaica nuts, and more shrivelled and less perfectly cured than these. Two methods of assay were tried in case of each kind of nut, using chloroform in the one and 88 per cent. alcohol in the other, as boiling with pure water was impracticable, on account of the large amount of starch contained in the nuts.

#### METHOD I.

This was similar to that employed by Schlotterbeck and Knox, and consisted merely in extracting the powdered nuts in a Soxhlet apparatus until the chloroform runnings no longer yielded a residue, evaporating off the chloroform and evaporating the residue to dryness on a water bath with calcined magnesia and sand, in a flat porcelain dish. This dry powder was then placed in an Erlenmeyer flask, and boiled with chloroform on a water bath. It was necessary to put a cork fitted with a small condenser or a long glass tube on the flask, so as to avoid loss of chloroform. After heating to boiling for half an hour the contents of the flask were allowed to cool and then filtered into a tared flask. On distilling off all the chloroform and heating the flask for half an hour on a water bath at 100 degrees C., it was weighed and the amount of caffeine obtained thus determined. The caffeine obtained was not quite white, but had a light brownish tint.

#### METHOD II.

The powdered nuts were boiled in an Erlenmeyer flask with an inverted condenser or long tube attached, on a water bath for three hours, with a mixture of two parts of water and one part of alcohol by volume. Part of the starch will, of course, be hydrolyzed, but not sufficient to render filtration impossible. The contents of the flask, after cooling, were filtered and the filtrate evaporated nearly to dryness on a water bath in a porcelain dish. When nearly to dryness, calcined magnesia and sand were added and all evaporated to complete dryness, stirring carefully and frequently. The residue was then transferred to an Erlenmeyer flask and exhausted with chloroform and treated just as in case of Method I. The caffeine obtained by Method II was of a pure white color, and was hence purer than that obtained by Method I. Besides this advantage of Method II over Method I, may be men-

\*Proc. Amer. Phar. Assn., 1895.

†Amer. Jour. Pharm., 1895, p. 205, and Jahresbericht der Pharmacie, 1895, p. 157.

‡H. and S., "Des Kolas Africains," Paris, 1884, Masson.

\*Pharmaceutical Journal.

\*Read at a meeting of the Philadelphia College of Pharmacy.

tioned the fact that Method II was much more expeditious and satisfactory, and extracted more caffeine than Method I.

Below are appended the results:

	African Nuts.	Jamaica Nuts.
	Per cent.	Per cent.
Method I.—Caffeine	2.04	1.75
Method II.—Caffeine	2.24	1.93

These figures would indicate that the African kola nuts are richer in caffeine than the West India nuts, which was not to be expected, considering that the latter are the more expensive; furthermore, they show that the method which uses 88% per cent. alcohol extracts the caffeine more completely than does the method which uses pure chloroform. The extract obtained from the Jamaica nuts was lighter in color than that from the African nuts, and resembled a tea infusion, whereas the extract from the latter resembled an infusion of coffee in color.

### Chinese Opium.\*

BY FRANK BROWNE, F.C.S.

Acting Government Analyst, Hong Kong.

In the Chinese provinces of Kwei-chou, Yunnan and Szechuen large quantities of opium are grown for native consumption. In the "Legation Report on the Trade of China in 1894," Mr. Beaucherk, Secretary of Her Majesty's Legation at Peking, writes: "The customs revenue was increased by every division of trade with the sole exception of Indian opium. . . . Native opium is rapidly displacing the high priced imported drug, as will be seen from the various consular reports."

A reason adduced for this is that the home grown substance answers all ordinary requirements, and that the price is so low that any other better in quality is bought only by those who can afford it as a luxury.

Professor Attfeld, in his "Report for 1892 on the British Pharmacopoeia, 1895," mentions that it had been asserted that many hundreds of medical practitioners, equally familiar with the use of opium in England and India, have prescribed a 10 per cent. morphine Turkish opium, and a 5 or 6 per cent. (average) morphine Indian opium, in similar doses, without noticing any marked difference in sedative effect; at the same time he points out the desirability of further experiments with regard to the narcotizing power of Turkish and Indian opium.

It must be remembered also that the percentage of morphine is not the only consideration in determining the value of smoking opium, as it has been shown that some opiums low in morphine are preferred to others containing more of this alkaloid. A minute examination of Chinese opium has therefore been made in order to ascertain as far as possible not only the amounts of morphine, but also of other alkaloids possessing physiological activity, also its freedom from adulteration, from which results a better idea as to its true value may be had.

Genuine specimens of the 1898 crop were obtained through the kindness of H. E. Hobson, Commissioner of Customs, Hong Kong, from the provinces of Kwei-chou, Yunnan and Szechuen respectively. The cost of these opiums varies from 14 to 18 taels for 100 taels' weight (8½ English pounds)†

Kwei-chou.—This was in flat oval cakes,

each weighing 1 catty (1½ English pounds). Each cake was wrapped, after the Chinese manner, in two folds of white tissue paper, then in thin brown paper, and bore a label on which was written in Chinese characters the name of the province and that of the seller. The drug itself was dark brown in color, oily to the touch, granular in fracture, fairly hard, and its odor was strongly narcotic.

Yunnan.—This was also in flat oval cakes resembling Kwei-chou opium, and was similarly wrapped and marked. The opium was black throughout, forming a smooth plastic mass, fairly hard, of good appearance and odor, not oily to the touch.

Szechuen.—In similar packages to the preceding. It was so soft that ten folds of a kind of tissue paper had been wrapped round to preserve the shape of the cakes. So much paper is an important consideration in buying this opium, as from a determination calculated on the dried opium, this paper formed 20 per cent. of its weight. The drug itself was black in color, smooth, plastic, with good odor. It contained, however, paper fiber in little lumps scattered irregularly throughout the mass. Not oily to the touch.\*

In the gravimetric examination attention was given to—

1. Moisture.
2. Ash.
3. Solubility in cold water.
4. Morphine by the method described in the British Pharmacopoeia.
5. Morphine. This and the following alkaloids by the process described.
6. Narcotine.
7. Papaverine.
8. Narceine.
9. Thebaine.
10. Codeine.

Both chemical and microscopical examinations were made for the presence of starch, sugar, gum, tannic acid and other likely impurities. The three specimens were found to be free from all foreign matter, except that the Szechuen variety contained paper fiber, which the microscopical examination showed was of the same character as the paper in which it was wrapped. In all estimations the opium taken was freed from this paper fiber.

**Determination of the Alkaloids.**—The process found to be most suitable for obtaining a solution containing the alkaloids was as follows:

Fifty grams of the opium, in which the amount of moisture had been previously ascertained, was exhausted with warm water. The insoluble portion was gently dried and exhausted in an extraction apparatus by means of ethylic alcohol. The alcoholic solution evaporated left a residue from which, after having been mixed with sand, the greater portion of the alkaloid could be extracted by means of a 2 per cent. solution of acetic acid in water, but the last traces were removed only by increasing the proportion of acid to 10 per cent. and using a gentle heat. The aqueous and acid solutions were then precipitated by ammonia; the precipitate having been removed, the liquid was shaken with amyl alcohol until all alkaloid was removed. The amyl alcohol solution was then evaporated, and the residue, together with the precipitate obtained by ammonia, were treated with boiling ethylic alcohol. The alcoholic solution evapo-

rated left a blackish mass of crystals consisting chiefly of alkaloid.

The process for the separation of the alkaloids now obtained is Plugge's,\* somewhat modified, certain additions to and alterations in his process having been made in order to quantitatively separate the alkaloids in a state of purity from a solution which contains these alkaloids in a state of but moderate purity.

The additions to and departures from the original process are here described as they were made throughout the separation.

In the case of Yunnan opium the narcotine and papaverine were precipitated as a gummy mass which could not be washed with water, but this difficulty was got over by using a semi-saturated solution of sodium acetate.

The papaverine from each opium was dissolved in weak hydrochloric acid, and precipitated by phospho-molybdic acid. The precipitate was shaken with baryta water and benzene; from the benzene the crystalline alkaloid was obtained on evaporation. The narcotine in all cases was very pure after crystallization from benzene.

The narceine precipitate had to be washed with a semi saturated solution of sodium acetate except in the Kwei-chou opium determination. In Yunnan and Szechuen opiums the narceine precipitate was found to contain narcotine and a little morphine. These were separated by dissolving the precipitate in weak acetic acid, shaking out the narcotine and narceine from the acid solution with chloroform, dissolving the chloroform residue in weak acetic acid, and shaking out the narcotine with ether, having previously made alkaline. The narceine was then obtained by means of chloroform, but being impure was dissolved in weak hydrochloric acid, precipitated by phospho-molybdic acid, and removed from the precipitate by shaking with baryta water and chloroform. The narcotine from the ethereal solution was dissolved in dilute hydrochloric acid precipitated by phospho-molybdic acid, and recovered by shaking with baryta water and ether.

Thebaine was obtained very pure from Kwei-chou opium by means of sodium salicylate and ammonia, as ordered by Plugge, but with the other opiums it was necessary to purify by dissolving in weak acetic acid, alkalizing and shaking out with ether.

Finally, the separation of morphine, codeine, and traces of narceine and thebaine, was effected by first shaking the acid solution with chloroform, as was done previously with the narceine precipitate, then having removed the chloroform from the acid solution by a gentle heat, soda solution and amyl alcohol were added to extract the remaining alkaloids. The amyl alcohol having been dissipated, the crystalline residue was treated with benzene, leaving morphine undissolved. The benzene residue was treated with water to remove codeine, and the codeine was then obtained by shaking the aqueous solution with benzene. The portion of the benzene residue from which codeine had been washed out was dissolved in weak acetic acid and added to the chloroform residue also dissolved in weak acetic acid; having added ammonia by shaking this solution containing the traces of narceine and thebaine with ether, the thebaine was sep-

\* *Pharmaceutical Journal*, L.V. 1329, p. 493.

† The Chinese tael is a weight of silver equivalent to 100 candareen; a British dollar is equivalent to 72 candareen.

\* A specimen of 1896 Szechuen opium has been sent from Chinkiang. It is in round, flattened cakes, weighing about 2½ pounds each; the base of each cake is a portion of the leaf of the banana plant. It appears to be opium of good quality.

\* *Journ. Chem. Soc. Abs.*, III, 851; *Archiv. Pharm.* [3], xxv, 343-354.

arated; the narceine was then removed from the alkaline solution by chloroform. In the three opiums the quantity of these traces of narceine and thebaine was very small.\*

Observations were made with each alkaloid isolated, in order to see that it responded to its distinctive tests, and particular attention was devoted to the behavior of each alkaloid, when treated with pure chloroform, benzine and ether.

Quite a notable quantity of narcotine was precipitated with the narceine in Yunnan and Szechuen opiums. Before purification with phospho-molybdic acid, it was noted in each case that this narcotine melted at about 60 degrees; purification raised the melting point more than 100 degrees.

When transferring the alkaloids from an aqueous solution to chloroform, benzine, ether or amyl alcohol it was found that the washing of these latter solvents with a little water was a precaution of considerable importance, decomposition of the alkaloid otherwise being probable.

From the remarks made during the paper, and from the results recorded in the chart, the quality of Chinese opium can be well seen. The Szechuen opium as sent had evidently been collected carelessly, but it is doubtful whether the presence of so much paper and paper fiber indicates intent to adulterate; rather, it seems as if the juice had been collected on paper and the whole mass incorporated, it being too much trouble to scrape off the juice, but this is only a conjecture. Conclusions as to the probable physiological activity of the opiums can be drawn from the results recorded.

#### COMPOSITION OF CHINESE OPIUM.

The results are calculated in 100 parts of the dried opium.

	Kwei-chou.	Yunnan.	Szechuen.
Morphine.....	4.321	9.487	11.271
Narcotine.....	1.938	6.151	6.612
Papaverine.....	0.848	0.404	0.334
Narceine.....	0.002	0.502	0.709
Thebaine.....	0.901	0.817	0.709
Codaine.....	0.006	0.157	0.181
Morphine by British Pharmacopoeia method.....	3.88	8.94	9.86
Matter insoluble in cold water.....	51.62	40.50	44.19
Moisture.....	24.38	29.72	38.21
Ash.....	4.58	3.13	2.24

**Smoking Value of Chinese Opium.**—Extracts of Kwei chon, Yunnan and Szechuen opiums were prepared in the manner described by McCallum, and were then handed over to a Chinaman of considerable experience as a buyer, preparer and smoker of opium. He reported that the process employed had been incomplete, as the three extracts possessed a grassy taste not observed in the extract prepared by himself from Indian opium. An examination of his process showed that a toasting operation was included, but as this was not in the process described, this toasting had not been followed in the preparation of the Chinese extracts. The three extracts

\*The morphine, narcotine, papaverine, narceine and codeine were all weighed in the crystalline form. The thebaine from Kwei-chou opium was a white powder which deposited crystals after solution in ether; the thebaine from Yunnan and Szechuen opiums was in a similar state of purity. Each alkaloid was dried at 100 degrees.

had therefore been compared with a standard extract prepared in a different manner. As it is essential for purposes of comparison that the process should be the same, further quantities have had to be prepared and are at present stored until ready for comparison, after which the report will be communicated.

It has been already stated that the value of opium for smoking purposes does not depend on the amount of morphine. The Chinese observer reported that comparing the above three extracts with each other, the Kwei chon was the best and strongest, the Yunnan was second in quality and strength, and the Szechuen was the most inferior, although this last contains much more morphine than the Kwei chon variety.

A series of similar observations is being made in order to obtain more complete information as to the constituents of Indian opium.

#### An Ingenious Fraud in Compound Liquorice Powder.

Some months ago, says George Coull in the *Chemist and Druggist*, I was handed a sample of *pulvis glycyrrhizæ compositus* for examination. The customer wished to have it matched, especially the color, which was lighter than any I have ever seen.

On comparing the sample with a standard sample of our own the following points of difference were observed. Standard sample I shall call No. 1, and sample sent for examination No. 2:

*a. Physical appearance.*—No. 2 was lighter in color than No. 1, and it was not ground to such a fine powder, there being more fibers of the liquorice root in No. 2 than in No. 1.

*β. Ash.*—No. 2 yielded a slightly higher percentage of ash than No. 1 did.

*γ. Sugar.*—Determination of the sugar in the cold water extract by Fehling's solution, after inversion, revealed the fact that the samples contained practically the same amount.

*δ. Color of aqueous extract.*—When equal quantities of the powders were shaken with equal volumes of water for equal periods of time, No. 1 gave a solution considerably darker in color than No. 2.

*ε. Taste.*—No. 1 had the characteristic sweet taste of liquorice, No. 2 being very bitter in comparison. A persistent bitterness was left at the back of the throat when a little of the latter was swallowed.

The first idea that naturally suggested itself on looking at the samples was that No. 1 contained a larger proportion of sugar than it ought to, hence its lighter color. The sugar determination, however, negated this view of the matter.

After fully considering the above mentioned points of difference, the only other conclusion I could come to—and it is a sufficiently startling one—was that the sample submitted to me had been compounded with liquorice root either partially or entirely deprived of its soluble matters.

All the evidence points to this being the case. If liquorice root is exhausted with water, the dark coloring matter will be extracted, and the powder will consequently give a lighter colored solution with water; the ash also will be a little higher owing to the loss of the organic coloring matter and increased percentage of sulphate and phosphate of calcium; and finally the sweet taste of the genuine

root will be almost entirely absent. When it is remembered that the function of the liquorice root in the compound powder is to cover the bitter taste of the senna and give a pleasantness to a mixture that would be nauseous without it, and that one sample had a pleasant taste and the other a persistent bitter taste, I think it is conclusively proved without further evidence that the liquorice is not present in proper proportion.

This particular form of adulteration is rather unique, and shows the versatility of the modern adulterator. Where the fraud was perpetrated, whether the liquorice was exhausted in Britain or in the country in which it was collected, only the makers of the compound powder can tell. It does not seem possible that this kind of sophistication can be indulged in with impunity for any length of time especially as it can be so easily detected by the sense of taste. At the same time, it may not be inopportune to extend a word of warning against this quite up-to-date form of fraud.

#### Dining from Bouquets.

Although it is well known that many kinds of flowers are used in medicine, the fact may not be known to many that the blossoms of certain plants are employed as articles of food. In many parts of India the flowers of a sapotaceous tree (*Bassia latifolia* or *mahwah*) form a really important article of food. These blossoms, which are succulent and very numerous, fall at night in large quantities from the tree, and are gathered early in the morning and eaten raw. They have a sweet but sickly taste and odor. They are likewise dried in the sun and sold in the bazaars. The Bheels dry them and store them as a staple article of food, and so important are they considered for this purpose that when in expeditions for the punishment or subjection of these tribes, when unruly, a threat is made by the invading force to cut down their *Bassia* trees. The menace most commonly insures their submission. An ardent spirit like whiskey is distilled from these flowers, and is consumed in large quantities by the natives of Guzerat, etc. The Parsees and hill people eat the flowers both raw and cooked, and often with the addition of grain, and also make sweetmeats of them. A single tree will afford from 200 to 400 pounds of the flowers.

The blossoms of another species (*B. longifolia*) are employed in a similar manner by the natives of Malabar and Mysore, where it abounds. They are either dried and roasted and then eaten, or are bruised and boiled to a jelly and made into small balls, which are sold or exchanged for fish, rice and various sorts of small grain. The flowers of the Judas tree (*Cercis Siliquastrum*) of Europe have an agreeable acid taste, and are sometimes mixed with salads or made into fritters with batter, and the flower buds are pickled in vinegar. The flowers of the American species (*C. Canadensis*), the red bud, are used by the French Canadians in salads and pickles. The flowers of the *Abutilon esculentum* (*bencao de deos*) are used in Brazil as a boiled vegetable. The flowers of *Moringa pterygosperme* (the horse radish tree) are eaten by the natives of India in their curries.

The large and showy flowers of *Tropaeolum majus* (the Indian cress or nasturtium) are frequently used along with the young leaves as a salad. They have a warm taste, not unlike that of the

common cress, and it is from this circumstance that the plant has obtained the name of nasturtium. The young calices of *Dillenia scabrella* and *D. speciosa*, which are swollen and fleshy, have a pleasantly acid taste, and are used by the inhabitants of Chittagong and Bengal in their curries and also for making jelly.

The flowers of *Rhododendron arboreum* are eaten by the hill people of India, and are made into a jelly by the European visitors. Yet poisonous properties are usually ascribed to the species of this genus, and it has been said that the *R. Ponticum* was the plant from whose flowers the bees of Pontus collected the honey that produced the extraordinary symptoms of poisoning described as having attacked the Greek soldiers in the famous retreat of the ten thousand. The flower buds of *Zygophyllum Fabago* are used as a substitute for capers, and the flowers of *Melanthus major*, a plant of the same order, are so full of honey that the natives of Good Hope, where the plant grows wild, obtain it for food by shaking the branches, when it falls in a heavy shower. *Coccoloba urifera* is remarkable for the peculiarity of the calyx, which becomes pulpy and of a violet color, whence the plant is called the sea-side grape. This pulpy calyx has an agreeable acid flavor and is edible. The flower stalks of *Hovenia dulcis* become extremely large and succulent, and are used in China as a fruit. It is said that in flavor they resemble a ripe pear. The flowers of the pumpkin were cooked and eaten by some of the tribes of the American Indians, especially by the Aztecs, by whom they were highly esteemed. The cauliflower, which has been known from remote antiquity, differs in a remarkable manner from all the other varieties of the cabbage tribe, whose leaves and stalks alone are used for culinary purposes. Instead of the latter being used, the flower buds and fleshy flower stalks, which form themselves into a firm cluster or head, varying from 4 to 8 inches or more in diameter, here become the edible portion and one of the greatest of vegetable delicacies. The flower buds of *Capparis spinosa*, a plant which grows on walls, etc., in the south of Europe, are pickled in vinegar in Italy and form what are commonly known as capers. These are chiefly imported from Sicily, though the plant is largely cultivated in some parts of France. The cloves of commerce are the unexpanded flower buds of *Caryophyllus aromaticus* (*Myrtaceae*), a small evergreen, native of the Moluccas, but cultivated in several parts of the East and West Indies. Before the expansion of the flowers, which are produced in branched panicles at the extremity of the branches and are of a delicate peach color, the buds are collected by hand, or else sheets and mats are spread under the tree and the buds brought down by beating it with sticks. They are cleaned and then dried in the sun. A uniform brown color is imparted by slightly smoking them over a wood fire. The flower buds of *Calyptranthes aromatica*, another plant of the same order, may be advantageously substituted. The flower buds and the berries of the myrtle (*Myrtus communis*) were eaten as spices by the ancients, and are still used in Tuscany instead of pepper. Long pepper is furnished by the immature spikes of flowers of *Chavica Roxburghii*, which are gathered and dried in the sun. In chemical composition and qualities it resembles ordinary black pepper and contains piperine.

### Some Old Time Herb Gardens.

This was the subject of a lecture by Prof. R. J. Harvey Gibson, delivered at a recent meeting of the Liverpool Chemists' Association: Herb gardens, said the lecturer, were in existence before the science of botany was known, or anything written about it; therefore a history of the herb and botanic gardens of the world formed a concrete exposition of the science itself. About the fourteenth century the old German herbalists began to seek in their own country for the plants mentioned by the ancient Greek writers, and these they catalogued in their herbals. In 1809 a garden was planted by Mathias Sabbaticus, attached to an old Benedictine monastery, which was, in fact, one of the early medical schools. The first real herb garden was planted in 1383, when it is recorded in the archives of Venice that the authorities granted a section of land, which was to be devoted to the cultivation of plants used in pharmacy; but all trace of it has now disappeared. The next herb garden of note, and it was a great one, was that of Padua, in 1545, and it is still in existence, but much enlarged and improved. A picture of this garden was thrown on the screen, showing the ancient portion (circular in form) in the center. At the University of Padua—the first to be established in Europe—they had a professor of botany. In the garden of Padua is still preserved the Palm of Goethe, which is now 800 years old. After this time a number of gardens were planted in the different cities of Europe. Notable among these were the gardens of Pisa, in 1547; Leyden, planted in 1577, and Montpellier, which is yet one of the finest on the Continent, in 1596. It was founded by Pierre de Belleval, and may be considered as the last of the old type of herb gardens. About the beginning of the seventeenth century many travelers, Italian principally, set forth to explore new lands and countries, and brought back specimens of strange seeds and plants to the various countries of Europe, and these often found their way to the old herb gardens. The great Jardin des Plantes of Paris was founded in 1547, and is still a very fine botanical garden. The first public garden of the kind in England was founded in London some time afterward, and is mentioned by Gerard. It is supposed to have been situated somewhere near where the Holborn Viaduct now stands. The physic garden of Chelsea was the next, and was founded in 1677 by the Apothecaries' Society. In consideration for some of the land the Apothecaries' Society were to supply the Royal Society with 50 specimens of plants each year until 2,000 had been given. In the first catalogue 499 plants are included, all of which were used in pharmacy. Linnaeus visited the garden in 1786. This great botanist's garden at Upsala was the first founded for purely educational purposes. To show the progress that has been made in the planting of botanical gardens, the lecturer described in detail the three great gardens of the world at the present time. First, he placed the Missouri Botanical gardens of St. Louis, in the United States. This garden is equipped with every modern scientific improvement, and was founded by Mr. Shaw, a native of Sheffield. It contains a fine herbarium, laboratories, and even a hotel, where 12 students are lodged. Second, he would rank the famous tropical gardens of Java, which covered 140 acres. These gardens are a marvel of luxuriance and beauty and are

excellently managed and equipped. Almost every famous botanist of modern times had studied in the laboratory at Java. Third, he would place Kew Gardens, which no garden in the world rivaled in completeness; they cover 240 acres of land.

### Further Experiments with Wild Cherry Bark.\*

BY DR. ALFRED R. L. DOHME AND DR. HERMANN ENGELHARDT, Baltimore.

In a previous publication upon this subject† we stated that we would take up this work on a more extensive scale this winter in order to ascertain if there were any definite or even approximate rule as to the relative yield of hydrocyanic acid contained in the bark of old wild cherry trees (i.e., brown or "rosed" bark), and in the bark of young wild cherry trees (i.e., green or virgin bark). It will be remembered that Prof. A. B. Stevens of Ann Arbor found that the thick brown bark was richest, while our results indicated that the thin green bark was richest in hydrocyanic acid. In order to get a more general grasp of the subject, we obtained samples of *Prunus virginiana* from Dr. E. B. Squibb of Brooklyn, Prof. J. U. Lloyd of Cincinnati, and from three firms in the city, Muth Bros. & Co., Gilpin, Langdon & Co., and Higgins & Waters. To all of these gentlemen we wish to express our thanks for their courtesy. We at once sent a duplicate set of all of these samples to Professor Stevens and we await his results with them with interest.

#### SOURCE OF THE SAMPLES.

Professor Lloyd's samples were gathered in Ohio, those of Higgins & Waters in New York State and the rest in Virginia and other Southern States. The samples of Professor Lloyd possess an additional interest in that they were all taken from one tree and from three parts of it, being 1, bark of root; 2, bark of tree, and 3, bark of twigs. The results obtained from them are not, strictly speaking, comparable with the brown and green classification, as the bark of the tree was also green and comparatively thin. We will hence put these in a series for themselves. The common bark sent by Dr. Squibb was old and brown to be sure, but old rather in the sense of having been stored a long time than in having been formed on the tree earlier.

#### A CORRECTION.

It appears that in copying our results in the article published during the month of November,‡ we got the methods I and II, mixed. The figures for method I belong to method II and vice versa. This has no effect upon the conclusion in reference to the relative value of the two kinds of bark, but reverses the conclusion drawn as to the relative value of the methods employed. There is little difference, to be sure, in any case between the two methods given, but what difference there is points to the superiority of the titration over the gravimetric method, thus confirming what Professor Stevens observed in this particular. Besides the fact that it indicates more hydrocyanic acid, the titration method has the double

\* *Pharmaceutical Review*.

† *AMERICAN DRUGGIST*, vol. 27, p. 261, and *Phar. Rundschau*, vol. 13, p. 280.

‡ *AMERICAN DRUGGIST*, vol. 27 (1895), p. 251 and *Phar. Rundschau*, vol. 13, p. 280.



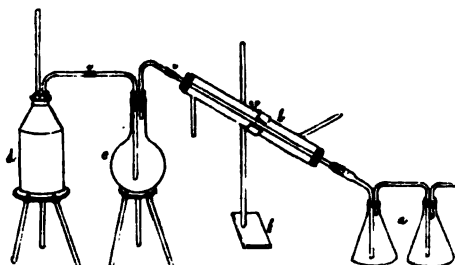
advantage of being more expeditious and much less troublesome. For this reason we have omitted entirely the results obtained by the gravimetric method of weighing the metallic silver which results from heating the silver cyanide in a reducing flame.

#### THE GREEN THIN BARK THE RICHER.

Our results, as will be seen below, confirm those we obtained before and indicate that the green thin cherry bark is really richer in hydrocyanic acid than the thick brown bark, thus substantiating the "taste" test; for it is a well-known fact that the green bark possesses as a rule a stronger and more acid taste than the brown bark. The distillation was carried on as indicated by us in our former paper and we have become convinced that live steam at 100 degrees C. will drive every trace of hydrocyanic acid out of wild cherry bark in less than 20 minutes. The apparatus used is shown in the figure herewith.

#### THE DISTILLATION.

*d* is a tin can half filled with water and closed by a two holed cork supplied with two glass tubes, one of which dips below the surface of the water and the other connects the can with a liter glass Flor-



EXTRACTION APPARATUS FOR WILD CHERRY.

ence flask *c* through a double-holed rubber stopper. The tube connecting the latter with the can dips below the surface of the liquid in the flask and the other tube in the flask connects it with the long Liebig condenser *b*, through which cold water is of course rapidly flowing during the process. The condenser is supported by a stout iron stand, *f*, being firmly clamped to the latter by an iron screw clamp. The end of the condenser tube is connected with a small Erlenmeyer flask, *a*, by means of a glass tube attached to it by a piece of rubber tubing, *e*, the glass tube, which is bent, dipping below the solution of caustic alkali contained in the flask. This flask is connected with another similar flask also containing caustic alkali solution and attached merely for safety's sake so as to catch and absorb any hydrocyanic acid that might pass through the first flask undissolved.

#### THE ASSAY.

The assay is carried on as follows: 10 gm. of wild cherry bark, ground to a No. 40 powder, are allowed to macerate for 24 hours with 100 ccm. of distilled water in a 250 ccm. corked Erlenmeyer flask, shaking frequently. The entire contents are then washed into the liter flask *c* by means of distilled water and the flask *c* then securely corked with the two holed stopper already described. The water in the can *d* is then heated to boiling and

as soon as steam comes over into the flask *c* this is also heated by a Bunsen burner placed under it. Distillation is continued about 20 minutes and the flask *a* then removed as well as the burner under flask *c*. Some of the distillate is then caught up in a clean test tube and the flask *a* again attached to the condenser by means of the rubber tube *e*. To the contents of the test tube a few drops of a solution of a mixture of ferrous and ferric salts are added, the mixture made alkaline with caustic soda until a permanent bluish-green precipitate is formed, and then heated gently. On adding an acid, to acid reaction, a light brown or a light blue color may result; in the former case there is no more hydrocyanic acid present and in the latter case there is still some hydrocyanic acid present. This reaction is capable of detecting hydrocyanic acid in dilutions of 1 to 50,000 parts of water.\*

#### THE TITRATION.

A decinormal solution of silver nitrate is made and an endiometer graduated to tenths of a cubic centimeter filled with it. The contents of both flasks *a* are poured into a large beaker and a decigram of sodium chloride added and dissolved in the liquid. The silver solution is added until a permanent milkiness results, due to the formation of silver chloride. Read off the number of cubic centimeters of silver solution used and multiply by two, as half of the potassium cyanide present is used up in dissolving the silver cyanide formed, to form a soluble double salt. From this it is easy to calculate the amount of hydrocyanic acid present. By this method the distillation proceeds under normal pressure, and hence temperature, whereas in Professor Stevens' method the thistle safety tube introduces a slight pressure resulting in a slightly higher temperature. This may not, however, affect the result. The main preference of our method with live steam is double saving of time, first because it actually occupies one twentieth of the time required to make a complete distillation by Professor Stevens' method, and second because one can perform other work while it is going on, while Professor Stevens' method requires constant watching for several hours.

#### SUMMARY OF THE RESULTS.

Most of the barks examined are very poor, at least as compared with what we have examined previously, although as before stated, the bark of root of the samples from Professor Lloyd is normal or rather above the average.

#### THICK BROWN WILD CHERRY BARK.

	Per cent. HCN.
1. Squibb—"common bark".....	a—0.0782 b—0.0831
2. Muth—"brown bark".....	a—0.0836 b—0.0782
3. Lloyd—"bark of tree".....	a—0.1760 b—0.1736
4. Higgins & Waters—"rosed bark".....	a—0.1565 b—0.1565

#### THIN GREEN WILD CHERRY BARK.

	Per cent. HCN.
1. Squibb—"young bark".....	0.22
2. Muth—"virgin bark".....	0.1418
3. G. L. & Co.—"green cherry".....	0.1565
4. Lloyd—"bark of twigs".....	a—0.115 b—0.117
5. Higgins & Waters—"green cherry".....	a—0.168 b—0.167

The results obtained gravimetrically, which we have not recorded, agreed with

those obtained volumetrically, although in nearly all cases somewhat lower than the latter. We believe this is due to the fact that hydrocyanic acid does not as readily decompose silver nitrate as it does caustic potash and some may be lost on this account. As we cannot recommend the gravimetric process in any particular, and it gives lower results, we have discarded it entirely. A comparison of the yield of hydrocyanic acid from various parts of the tree *prunus virginiana* is shown in the table of results obtained from Professor Lloyd's three samples:

#### RESULTS WITH PROF. LLOYD'S SAMPLES.

	Per cent HCN.
Bark of root of wild cherry.....	a—0.3423 b—0.3423
Bark of tree of wild cherry.....	a—0.1760 b—0.1736
Bark of twigs of wild cherry.....	a—0.1150 b—0.1170

This indicates very strongly that the bark of the root is richer than that of the tree and this in turn richer than that of the twigs.

If we leave out the samples of Professor Lloyd as not being gathered strictly in accordance with the thick brown and thin green requirement, since both were comparatively thin and green, and also the "common" bark of Dr. Squibb, which is hardly a thick brown bark, we must conclude as we did formerly\* that the thin green or young bark is richer in hydrocyanic acid than the thick brown or older bark.

#### PROFESSOR STEVENS' METHOD OF EXTRACTION NOT TO BE PREFERRED.

The two processes of distillation were tried on the same sample of bark in several cases and never once could we get as much hydrocyanic acid by Professor Stevens' method as we did by our own, although we distilled the same sample five times as directed by him. We further observed that practically all the acid came over during the first distillation, as all that came over during the second distillation required two drops of decinormal silver solution to completely unite with it and all that came over during the third distillation required but one drop of decinormal acid solution. Both of these quantities are practically insignificant. The fourth distillation yielded us no hydrocyanic acid. We hence conclude that the method using live steam, besides being simpler and more expeditious, is also fully as exact, if not more so.

Since this process of assay is so simple and easily manipulated, and since the above investigation has shown that the various parts of the plant vary so much in the amount of hydrocyanic acid they contain, and since the virtue of wild cherry bark is generally believed to reside in the hydrocyanic acid it contains, does it not seem rational to conclude that a hydrocyanic requirement and a process of assay for *prunus virginiana* are desirable additions to the United States Pharmacopoeia? Whether or not wild cherry bark is a therapeutically valuable drug is another question and does not concern us, inasmuch as the drug is used to a very large extent and might as well be dispensed of a nearly uniform strength, since this can so readily be ascertained.

Read the Review of the Wholesale Market and keep posted on prices. A dollar saved is a dollar gained.

\* Beilstein's Handbuch, Bd. I, p. 1411.

\* Loc. cit.

## The Jaborandi Leaves of Commerce.\*

By E. M. HOLMES, F.L.S.,

Curator of the Pharmaceutical Society of Great Britain.

In this communication the author remarked that he was induced to take up the subject from a suggestion by the secretary. The history of this remarkable drug commences from 1874, when it was introduced into Paris from Pernambuco by Dr. Coutinho, and was identified by Professor Baillon as the leaflets of *Pilocarpus pennatifolius*, described 20 years previously by Lessaire, but without any knowledge of the fruits. On comparing the commercial leaves with those grown at Kew, Mr. Holmes observed certain differences which led him to suggest that they were probably derived from a distinct species more nearly allied to *P. sellosinus*. The fruit of *P. Pennatifolius*, as well as the flowers of the commercial jaborandi, being unknown, the only evidence offered was that derived from the leaves and stems. Mr. Holmes pointed out in 1875 that the leaflets were more coriaceous than those of *P. Pennatifolius*, less tapering at base, and had the lateral veins more prominent on the upper surface; these leaflets turned brownish and not greyish on keeping. The histological characters were also different. In 1875 two forms appeared in commerce, which only differed in that one had glabrous and the other hairy twigs and leaves. Professor Planchon found that *P. pennatifolius* grown in Paris varied in the same manner. It may, therefore, be concluded that there are two forms of the same plant occurring in the same province, just as there are two similar forms of *Silene inflata* in this country.

In 1890 Mr. Holmes saw a jaborandi plant growing in the botanic gardens at Cambridge which presented the same kind of leaf as the commercial drug. On inquiry it was found from Dr. Craig that the seeds came from Bahia. When this plant flowered it was quite distinct from *P. pennatifolius*, having yellowish flowers suffused with pink across the center of the petals, the leaflets being usually in four pairs.

The habit of *P. pennatifolius* is that of a fine shrub between 5 and 6 feet high and bearing long, erect racemes of dark purple flowers, the leaflets being in two or three pairs. The Cambridge plant flowered when about 2 feet high and bore yellowish flowers and four pair of leaflets. The habit of this plant was more compact than that of *P. pennatifolius*. Having then obtained complete material, Mr. Holmes described the plant as a new species under the name of *Pilocarpus jaborandi*.

In 1875 the leaves and roots of a species of *Piper* were imported into this country, probably on account of a description by Dr. D. Parodi, in the *Revista Pharmaceutica*, of a jaborandi he referred to as *Piper jaborandi*. These leaves are thin, papery, greyish, and tapering equally to both ends, and have not the characteristic oil cells of *Rutaceae*. Peckolt gives *Piper citrifolium*, *P. nodulosum*, *P. unguiculatum*, *Arlanthe mollicoma* and *Piper mollicoma* as being used as jaborandi. These leaves are generally mixed with stalks, which have the enlarged nodes characteristic of pepper.

The leaves of the Pernambuco jaborandi had not been long in commerce when a large supply arrived in the London market from Buenos Ayres and Rio Janeiro which was distinctly poorer in pilocarpine. John Williams was the first to draw the author's attention to these leaves, which he believed had been collected in Paraguay. They were rather smaller than those from Pernambuco. The leaves had only two or three, never four pairs of leaflets. The leaflets of the Paraguay jaborandi were more tapered to the base, so that the widest part was above the middle, and the lateral veins were not prominent, the upper surface being greyish green, therefore it seemed to correspond well with the leaf of *P. pennatifolius*, which had been collected in Paraguay and Matto Grosso. The fruits corresponding to those grown by T. Hanbury.

There is little doubt but that this variety is *P. pennatifolius* exported via Rio and Buenos Ayres. For this kind Mr. Holmes proposed the designation Paraguay jaborandi.

The Paraguay jaborandi of commerce is, however, not uniform, some leaves being thin and tapering toward the base, with the veins on the upper surface not prominent; others are less tapering, with slightly prominent veins. It is evident, therefore that these jaborandis from Paraguay require more examination at the hands of a local botanist. In 1881 a false jaborandi appeared, but was not identified except that it was described as a rutaceous plant by Dr. Tschirch.

In 1893 a jaborandi appeared in Liverpool, and was first noticed by Mr. Wardleworth. It had small leaves similar to those of *Pistachia lentiscus*. The large oil cells and the micro-copic structure readily distinguished it from the latter, and proved it to be a rutaceous plant nearly allied to *Zanthoxylum*. Dr. Stapf discovered among a parcel the inflorescence, which at once indicated that it was a *Pilocarpus*; it proved to be a new species identical with one sent to Kew from Rio labelled *Zanthoxylum*, and was called by Dr. Stapf *Pilocarpus microphyllus*, as it had the smallest leaf of any known jaborandi. It gives about 0.5 to 0.6 per cent. of an alkaloid similar to pilocarpine. This variety might be distinguished as the Maranhão.

In 1894 another new jaborandi found its way to the London market. Its leaves were of a dark brownish tint on the upper surface and yellowish on the under, and were covered with short curved hairs. The fruit differed from any known variety, the ridges at the back of carpels being warty. These characters seemed sufficient to found a new species upon, and Mr. Holmes therefore described it—so far as was possible—in the absence of flowers under the name, *Pilocarpus trachylophus*, in allusion to the peculiarity of the carpels, and called it Ceara jaborandi. The leaves are identified by being smaller than those of *P. pennatifolius*, with recurved margins, smooth, dark, brownish green upper surface and pale yellowish under surface, and by the short curved hairs. According to Dr. Paul's analysis the leaves yielded 0.03 per cent. of crystalline nitrate, and when extracted by the caustic lime process only 0.012 per cent was obtained, indicating that the alkaloid was not pilocarpine.

The distinctive commercial names applied to the various jaborandis must not be taken to indicate that the leaves come only from those provinces, since it is only the ports of shipment that are

known; where exactly the plants are collected is at present unknown.

Last week a new kind appeared, a simple leafed species, the leaves being about the size of *Laurus nobilis*, the upper surface polished with the veins scarcely visible; on the under surface they are more so, but very slender. The texture is papery, rigid and brittle, and they are of dark, brownish green color above and paler beneath. The purely lanceolate outline of the leaf readily distinguishes it. It is probably *P. spicatus*.

In view of the possibility of other species of this genus entering into commerce it would be, perhaps, as well to give an outline of the known species of the genus *Pilocarpus*.

This genus belongs to the tribe *Xanthoryleae* of the *N. O. Rutaceae*, and differs from the allied genus *Xanthoxylum* in the unbranched inflorescence and valvate aestivation of the petals. In *Xanthoxylum* the inflorescence consists of paniced cymes, and the aestivation is imbricate. The plants of the genus are distributed throughout tropical America, from Mexico and the West Indies in the north to Paraguay and Sao Paulo in the south, extending eastward to New Granada and Matto Grosso. The species are imperfectly known, since the fruits have not in all cases been described. Up to the year 1895, from which the *Index Kewensis* dates, 16 species were known; since then two more have been published, viz.: *P. microphyllus*, Stapf and *P. trachylophus*, Holmes.

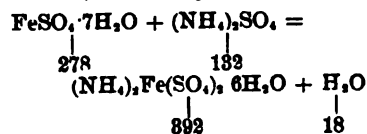
## The Preparation of Monsell's Salt.

This salt,  $\text{FeSO}_4 \cdot (\text{NH}_4)_2\text{SO}_4 \cdot 6\text{H}_2\text{O}$ , is much used in volumetric analysis to titrate such solutions as  $\text{K}_2\text{Cr}_2\text{O}_7$  and  $\text{K}_2\text{Mn}_2\text{O}_8$ , these being required for the determination of several pharmacopoeial products, especially ferrous salts and reducing agents generally. The method usually to be met with in books (*vide* Sutton, ed. 1893, p. 107), has not been a success in my hands, and acting upon the method for making ferri sulphas granulata, B. P., a product of a very satisfactory nature has been produced, which, like its prototype, is in a fine granular form, and assays 100 per cent. with pure bichromate. The plan adopted was as follows:

Take of—

Ferrous sulphate.....278 grains  
Ammonium sulphate.....183 grains

According to this equation—



These two sulphates are dissolved in a small quantity of cold water, the solution filtered if necessary, and warmed gently at 85°-40° C. to promote chemical action. Too great heat must not be used, or the solution will be decomposed with production of a ferric oxy-sulphate. The solution thus formed is poured into methylic alcohol, which precipitates the ferrous ammonium sulphate in fine granular crystals. These are collected on a calico filter, washed with a little methylic alcohol of the strength of proof spirit, and finally dried at a moderate temperature (85°-40° C.), or better, in the air, avoiding dust, etc.—G. E. Westley in *Pharmaceutical Journal*.

\* Read at a meeting of the London Chemists' Assistants' Association, November 23, 1895.

### The Camphor Industry.\*

The island of Formosa, or, as named by the Portuguese, "the beautiful island," and known to China as Taiwan, signifying "terrace bay," is the place where most of the camphor of Western commerce is produced.

The island is a most productive one, alike rich in vegetation and minerals, but it is the geographical position which makes it a place of extreme importance with regard to the Eastern trade. Swatow, Amoy and Foo-choo lie within the Formosa channel, while every vessel bound to and from the northern ports and Japan must pass through it. The total value of the foreign trade of Japan is over \$13,000,000, and of this Great Britain absorbs more than two-thirds. Of the many products of Formosa the chief is camphor, and the greatest part of this product is obtained from the wood of a tree, the *Camphora officinarum*, belonging to the natural order *Lauraceæ*, but unfortunately the laurel grows only in certain districts in the island, chiefly in that portion not included within Chinese territory; it is mainly confined to the country of the aborigines and its immediate borders. In consequence of the disturbed relations between the races of the island, thus induced on the borderlands, the risk attending camphor collecting is very great, the distillers requiring to be always on their guard, for a Chinaman's head is a patent of nobility to an aborigine, for without one he is excluded from the council of his tribe, and owing to the disturbed state of affairs in the East generally camphor is likely to be a somewhat scarce commodity for months yet to come.

#### THE DECLINE IN THE IMPORTS.

The trade returns for four months to April 80 last show only 4,785 packages imported into England, as against 13,204 in 1894 and 8,631 in 1898 for the same period. To such as are unacquainted with Formosa it is quite impossible to describe a virgin forest such as those met with in the island. The vegetation generally is characterized by tropical luxuriance, and in the mountain regions in the dense forests the various species of palms, aloes and the magnificent camphor trees are conspicuous—the last covers the whole line of mountains from north to south up to an elevation of 2,000 feet above sea level.

#### THE CAMPHOR TREE.

The tree grows to a considerable height, sometimes as much as 50 feet, and has a girth of 20 feet, with branches of 8 or 9 feet in circumference—the leaves are smooth and the trunk is covered with a flat greenish bark—the whole, with the roots and wood, has a strong odor of camphor. This product is found to lodge everywhere in the interstices of the fibers of the wood, also in the pith, but most abundantly in the crevices and knots. From the dangerous circumstances connected with the collection of the drug there is a great possibility of its extinction, as the extraction of the camphor entails the destruction of the tree, and this destruction has never been compensated by replanting; so that the forests are being gradually cleared away, the aborigines receding, and the Chinese encroaching as the work of destruction has progressed. But, somewhat to counteract this evil, the laurel has re-

ceived attention from experts and has now become naturalized in some of the warmer and tropical countries, such as Java, Brasil, Jamaica and the West Indies generally, Mauritius, Madeira and the Mediterranean region. It forms a large and handsome tree in sheltered spots in Italy, as far north as Maggiore; it may be found in the nurseries of Paris, and is not altogether unknown in England.

#### COLLECTING CAMPHOR.

But it is Formosan camphor that we specially note, and it is a novel and exciting adventure to accompany a band of camphor merchants meaning business, taking our lives in our hands, as the whole work, from beginning to end, has to be done in an enemy's country, and that enemy of a relentless character. Preparations being duly made, not only for collecting and producing the drug but for our own sustenance and protection, the party sets out, the district having been prospected beforehand and the spots selected. The trees chosen are those remarkable for the abundance of their sap, many being too dry to repay the cost of time and labor. The best part of the wood is secured for timber, which is in much request for carpentry and cabinet work. The branches and refuse are then taken while freshly cut and chopped into small pieces for distillation.

#### METHODS OF DISTILLATION.

The stills, built up in sheds, are of the simplest and rudest construction; these are moved as the advance is made from stage to stage, so that elaborate fittings would be cumbersome and out of place owing to this shifting at short intervals. About eight or ten fires are laid on the ground, over which is placed a long trough made of wood. This trough is lined with clay and half filled with water. Upon this boards are placed, pierced with holes which fit the trough, then rough jars are fixed containing the chips, which have been already prepared. These again are covered with inverted jars, and the whole made air tight by packing. The fires are now lit and the steam passes up through the holes in the boards. This soaks the chips in the jars and causes the sublimated camphor to settle in crystals on the insides of the pots from which it is scraped off and then passes through a second process of distillation in order to remove impurities. At the bottom of a copper still is placed a bed of dry powdered earth, if possible from an old wall—but this is not often get-at-able in a primeval forest—for the sake of the lime it contains, and on this is laid the crude camphor, this is again covered with earth, and so on alternately, until the vessel is full, the whole terminating with a layer of earth, which is finally covered with green mint. A second vessel, generally made of straw, smeared with clay on the outside, is placed over the still and luted on. This is then fixed over a fire and allowed to remain for a considerable time. After cooling, the camphor is found sublimed and attached to the upper vessel. When a sufficient quantity is obtained it is then packed in large vats or tubs provided with escape holes at the bottom, and through these holes exudes an oily liquid known as camphor oil, of a yellowish brown color. The exudation from the mass is to the extent of about 3 per cent. This liquid is of a very strong smell, and holds in solution an abundance of common camphor, which it deposits in

crystals when exposed to a low temperature, its density being 0.910. By exposure to oxygen or the action of nitric acid it absorbs oxygen and becomes solid camphor. This oil is much used by Easterners as an embrocation in rheumatic diseases and bids fair to become a valuable European import as a cheap substitute for camphor liniment.

It is not, however, salable on the spot, as it is inferior to the Malagan camphor oil, from which it is distinguished by the odor of sassafras. In Japan the oil is used for lighting purposes by the poor folk, and it is said to be superior to kerosene both in cheapness as well as in illuminating power.

#### HOW CAMPHOR REACHES THE MARKETS.

This product of the forest is shipped in a crude state from Tamsui, which is a free trade port at the northern extremity of the island, this being the characteristic export of the place, forming as it does the main supply of the European markets. From this place it is conveyed by native craft to various ports of China. Until the year 1868 the Chinese Government enjoyed a monopoly of the Formosan camphor trade; but it was then thrown open with very beneficial results. In 1870 and 1871 attempts were made to re-establish the monopoly under cover of a tax of less than a farthing per pound, in itself unimportant, but with the removal of the objectionable feature of the import the merchants have rested content. But as the supply of the trees and laurels in the island is being gradually exhausted, other countries have considered the matter, especially those adjacent.

#### PRODUCTION ON THE CHINESE MAINLAND.

A small quantity of the drug is produced at Chinchew, in the province of Toku, on the Chinese mainland. The method of preparation here differs somewhat from that of Formosa. The freshly gathered branches of the laurel are chopped into small pieces and steeped for some days in water, they are then boiled in a suitable vessel, being continuously stirred with a stick until the grains adhere to it in the form of a white jelly. The fluid is then poured off into glazed vessels and allowed to rest for some hours, when the camphor is found in a concreted mass. In Japan the laurel is found in the three principal islands. It flourishes best in the southern portions of the empire, Toxa and Sikok. The mild damp sea air favors its growth, and the principal preparation of the drug is carried on in these localities. Japanese camphor is distinguished from Formosan by being coarser grained, clearer, of pinker hue, and by subliming at a lower temperature.

It is also known as "Dutch" or "tub" camphor, the latter name arising from its being imported into Europe in tubs covered with matting, each placed within a second tub secured on the outside by hoops of twisted cane. No metal lining is used, and the camphor is thus drier than the Formosan. Each tub holds about 1 to 1½ hundredweight. The selling price is nearly twice as high as the Formosan, and the imports to Europe are about as 1 to 6.

#### THE REFINING OF CAMPHOR.

In India the refining of common camphor is a process of itself. The oil is absorbed by means of quicklime. Two earthen pots are luted together, having a small aperture for the escape of the air

\* The British and Colonial Druggist.

on the first application of heat. Camphor is mixed with water in proper proportions and put into a copper still; more is added and a copper lid is then put on, and to make it perfectly tight an iron bar is passed through it and the vessel by holes made for the purpose. The still is then lifted by handles and set on an earthen *chula*, below which fires are burning. The lid and edges of the still are smeared with wet clay which is piled up into a cone. In about 15 minutes steam comes through the hole where the bar goes, whereupon a cloth attached to a bamboo is dipped into a receptacle filled with water and mopped over the clay cone on the still, so that the water keeps the upper portion cool. This is maintained for three hours, when the sides of the still are beaten by a stick. If this produces the sound of an empty vessel it is known that the process of sublimation is complete; the still is then removed from the *chula* and the lid is opened. The camphor is found in a thick crust lining the upper part of the sides of the still. It is divided into four pieces by a knife then packed, and is

ready for the market. Such is the Indian process.

The refining of camphor was for long confined to Venice, but it is now carried on in England, Holland, Hamburg and Paris, the product being much finer and purer than that obtained by crude processes such as that described.

#### NGAI CAMPHOR.

One other kind of camphor still remains to be mentioned—that is Ngai camphor. This is manufactured at Canton and in the island of Hainan. The plant from which it is obtained being the *Blumea balsamifera*, called in Chinese, Ngai, abundant in tropical Eastern Asia. As this product is about 10 times the price of Formosan camphor it never finds its way into Europe as an article of trade.

It is consumed in China, partly in medicine and partly in perfuming the finer kinds of Chinese ink. The export of this camphor by sea from Canton is valued at about £3,000 per year. It is also sent from Kiung-chow, in the island of Hainan.—*The Produce World*.

hair with a brush, and solution No. 2 afterward.

Lead is also useful as a constituent of brown hair dyes, the acetate being the salt commonly employed. We quote the following from a collection of recipes:

Lead acetate..... 3ij  
Sodium hyposulphite..... 3ij  
Glycerin..... fl. 3ij  
Rose water..... fl. 3iv

The lead and sodium salts are dissolved in separate portions of the water, and filtered; then they are mixed, and the glycerin is added.

Mumly Graw.—S. E. F. asks if there is such a thing as Mumly Graw. He also tells us incidentally that he has had an order for "5 cents worth of Jobe Stears Beads."

Books to Study Pharmacy.—E. McF. writes: "Please say which books are best for a young man to learn pharmacy from preparatory to entering college, and the cost of same."

Inquiries of this kind are constantly being received and as constantly answered in these columns. Presuming that our correspondent is equipped with the rudiments of a general education, we should recommend him to procure copies of such works as Attfield's Chemistry (\$2.75), Caspari's Pharmacy (\$4.50), Oldberg's Home Study in Pharmacy (\$3), and the U. S. Pharmacopoeia (\$2.75) and maintain his subscription to the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, in the pages of which he will find from time to time suggestive papers dealing with the examination questions set by the various boards.

Latin should be studied during the first two years, and for this purpose Robinson's "Latin Grammar of Pharmacy and Medicine" (\$2) is a book to be recommended.

## Quiz Box.

### Answers to Questions.—Eleventh Series.

101.—Acacia. A gum derived from the Acacia Senegal; habitat, East Africa and Senegal.

102.—Anthemism. The flower heads of *Anthemism nobilis*; habitat, Southern and Western Europe.

103.—Aspidosperma. The bark of *Aspidosperma Quebracho-blanco*; habitat, South America.

104.—Aurantii Amari Cortex. The rind of the fruit of the citrus vulgaris; habitat, Southern Europe, West Indies and Southern Florida.

105.—Calamus. The dried rhizome of acorns calamus; habitat, North America and Northern Asia.

106.—Capsicum. The dried ripe fruit of *Capsicum fastigiatum*; habitat, the tropics of both hemispheres.

107.—Cassia Fistula. The pods of *Cassia Fistula*; habitat, East and West Indies.

108.—Castanea. The leaves of *castanea dentata*; habitat, Western Asia and Eastern United States.

109.—Colchici radix and Colchici semen. The corn and the seed of *Colchicum autumnale*; habitat, Southern Europe.

110.—Conium. The full grown fruit of *conium maculatum*.



We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of any unusual compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the labels used on packages of the compound should also be sent.

**Effect of Large Doses of Acetanilid.**—W. P. S.—Large and continuous dosage of this drug would, according to Professor Hare, bring about congestion of the liver, kidneys and spleen, followed by death. After the injection of a poisonous dose the lips become blue, the face livid, cyanosed, expressionless or anxious. The forehead and cheeks become covered by beads of sweat, which gradually extend over the rest of the body. Acetanilid is said to be cumulative in its action, but poisoning from prolonged use of the drug rarely happens.

**Honey and Almond Cream.**—H. W. B. and C. A. W.—We cannot furnish the formula of the proprietary compound you ask for. A preparation corresponding to the title given is made as follows:

#### HONEY AND ALMOND CREAM.

	Parts.
Ointment of rose water, U. S. P.....	5
Oil sweet almonds.....	5
Glycerin.....	5
Boric acid.....	5
Solution of soda, U. S. P.....	12
Mucilage of quince seed (2 drs. to 1 pt.)...	25
Water, sufficient to make.....	200
Oil bitter almond,	
Oil rose, of each sufficient to perfume.	

Heat the ointment, oil and solution of

soda together, stirring constantly until an emulsion is formed; then warm together the glycerin, acid, mucilage and about 150 parts of water, mix with the emulsion, stir until cold, and make up to 200 parts by adding more water. Lastly add the perfume.

**Sanguinol.**—Ch. E. B.—The composition of this article is a secret of the manufacturer, and we hardly think it would be possible for us to induce him to make it public. We regret our inability to help you in the matter.

**Brown Hair Dye.**—C. R. B. asks for the formula of a preparation that will restore bleached blond hair to its original light brown color.

Bismuth is said to give the best results in cases of this kind, the following formula being used:

I.	
Bismuth citrate.....	3j
Distilled water.....	fl. 3ij
Rose water.....	fl. 3ij
Alcohol.....	3v
Ammonia water.....	q. s.

II.	
Sodium hyposulphite.....	3xij
Distilled water.....	fl. 3iv

Solution No. 1 is first applied to the



## Student's Column.

## Organic Materia Medica of the U. S. P.

(Continued from page 803, Vol. XXXVII.)

## Scammonium. Scammony.

BOTANICAL NAME...*Convolvulus scammonia*.  
 NATURAL ORDER...*Convolvulaceae*.  
 HABITAT...Western Asia.  
 CONSTITUENTS...Resin and gum; the former scammonin.  
 PROPERTIES...Hydragogue, cathartic.  
 PARTS USED...The resinous exudation from the living root.

Dose—Gm. 0.06–0.3; Resin, 0.06–0.3.

## Scilla. Squill.

BOTANICAL NAME...*Urginea maritima*.  
 NATURAL ORDER...*Liliaceae*.  
 HABITAT...Mediterranean coasts of Spain, France, Sicily and Africa.  
 CONSTITUENTS...Active principles: Scillipicrin, scillitoxin, scillin; glucoside scillain; also contains mucilage, sugar and calc. oxalate.  
 PROPERTIES...Expectorant, diuretic and cathartic.  
 PARTS USED...The bulb, sliced and dried.

Dose—Gm. 0.03–0.3; Acetum, Cc. 1–2; Ext. Fid., Cc. 0.20–0.30; Tinct., Cc. 0.60–1.30.

## Scoparius. Broom.

BOTANICAL NAME...*Cytisus scoparius*.  
 NATURAL ORDER...*Leguminosae*.  
 HABITAT...Eastern Asia and Great Britain.  
 CONSTITUENTS...Volatile oil, scoparin, sparteine, tannin, wax, etc.  
 PROPERTIES...Diuretic and cathartic.  
 PARTS USED...The tops.

Dose—Gm. 1–2 in decoction; Ext. sd., Cc. 1–4.

## Scutellaria. Scutellaria; skullcap; hoodwort; madweed.

BOTANICAL NAME...*Scutellaria lateriflora*.  
 NATURAL ORDER...*Labiatae*.  
 HABITAT...North America.  
 CONSTITUENTS...Bitter principle, glucoside, volatile oil, tannin, sugar.  
 PROPERTIES...Tonic, nervine, antispasmodic.  
 PARTS USED...The herb.

Dose—Gm. 2–4; Ext. sd., Cc. 4–8.

## Senega. Senega; seneka root.

BOTANICAL NAME...*Polygala Senega*.  
 NATURAL ORDER...*Polygale*.  
 HABITAT...United States.  
 CONSTITUENTS...Polygalic acid, senegin, methyl salicylate, sugar, etc.  
 PROPERTIES...Expectorant, emetic.  
 PARTS USED...The root.

Dose—Gm. 0.2–1.5; Ext. sd., Cc. 0.30–1.30.

## Senna. Senna.

BOTANICAL NAME...*Cassia acutifolia* and *cassia angustifolia*.  
 NATURAL ORDER...*Leguminosae*.  
 HABITAT...Eastern and Central Africa and India.  
 CONSTITUENTS...Chrysophan, cathartic acid, sennit (cathartmannit), sennacrol, mucilage, etc.

PROPERTIES...Expectorant, emetic.  
PARTS USED...The leaflets.

Dose—Gm. 8–15; Conf., Gm. 8; Ext. sd., Cc. 4–8; Inf. Comp., Cc. 64–128; Syrup, Cc. 4–16.

## Serpentaria. Serpentaria; Virginia snake-root.

BOTANICAL NAME...*Aristolochia Serpentaria* and *aristolochia reticulata*.  
 NATURAL ORDER...*Aristolochiaceae*.  
 HABITAT...United States.  
 CONSTITUENTS...Volatile oil, aristolochine, tannin, mucilage, resin.  
 PROPERTIES...Stimulant, diaphoretic, tonic.

PARTS USED...The rhizome and roots.  
Dose—Gm. 0.3–2; Ext. sd., Cc. 0.30–1.30; Tinct., Cc. 4–8.

## Sevum. Suet; mutton suet.

ZOOLOGICAL NAME...*Ovis Arles*.  
 ORDER...*Ruminanta*.  
 HABITAT...Domesticated.  
 CONSTITUENTS...Stearin and palmitin.  
 PROPERTIES...Lenitive.  
 PARTS USED...The internal fat of the abdomen.

## Sinapis Alba. White mustard; yellow mustard.

BOTANICAL NAME...*Brassica alba*.  
 NATURAL ORDER...*Cruciferae*.  
 HABITAT...Southern Europe and Western Asia.  
 CONSTITUENTS...Fixed oil, proteid substances, sinablin, sinapine sulphocyanide.  
 PROPERTIES...Tonic, laxative, diuretic, externally rubefacient and epispastic.

PARTS USED...The seed.

Dose—Gm. 1–4.

## Sinapis Nigra. Black mustard.

BOTANICAL NAME...*Brassica nigra*.  
 NATURAL ORDER...*Cruciferae*.  
 HABITAT...Southern Europe and Western Asia.  
 CONSTITUENTS...Fixed oil, sinigrin, sinapine sulphocyanide, volatile oil derived from sinigrin.  
 PROPERTIES...Similar to *Sinapis alba*.  
 PARTS USED...The seed.

Dose—Similar to *Sinapis alba*.

## Spigelia. Spigelia; pinkroot; Maryland pink.

BOTANICAL NAME...*Spigelia marilandica*.  
 NATURAL ORDER...*Loganiaceae*.  
 HABITAT...Southern United States.  
 CONSTITUENTS...Volatile alkaloid, spigeline, volatile oil, resins, bitter principle.

PROPERTIES...Anthelmintic, purgative.

PARTS USED...The rhizome and roots.

Dose—Gm. 1–4; Ext. sd., Cc. 4.

(To be continued.)

## Examination Questions of the Tennessee Board of Pharmacy.

## PHARMACY.

1. State exactly how you would prepare a blister plaster 8 x 10 inches.

2. Should a physician ask you to prepare 60 ccm. of a palatable liquid mixture, containing one grain of sulphate of quinine to each 4 ccm., state how you would prepare it, and what quantities of each ingredient you would use.

3. If you had a prescription for pil. hydr. prot. iod. o. ol. No. XXX, what equivalent strength would you dispense if yours were not so marked?

4. (a) If you were called on to dispense the following, state in plain terms how you would prepare and how much in apothecary's weights and measures you would use of each? (b) What price would you put on it?

Eserin sulphate..... 0.08  
 Morphia sulphate..... 0.06  
 Zinc sulphate..... 0.08  
 Acid boric..... 0.63  
 Aq. dist. ad..... 80.0  
 8. eye drops.

5. State in your own words how you would prepare an ointment of belladonna containing 48 grains of the extract to the oz. of benzoated lard.

6. (a) State in your own words how you would prepare an emulsion of turpentine (b) Give the names of all the official emulsions you can.

7. (a) Fold a filter paper and inclose it with your answers with your number marked on it. (b) State for what purpose it would be used in pharmacy.

8. State in your own words how you would proceed to pack a percolator.

9. (a) What articles would you use in making oleate of morphia? (b) How much of each would you use to make 1 oz. of 6 per cent. solution? (c) What is the manner of procedure?

10. State the dose of the following drugs:

Potass. acet.  
 Tr. gelsemium.  
 Hydrarg. chlor. mit.  
 Infus. digitalis.  
 Argenti nitras.  
 Aq. amygdal. amara.  
 Santonina.  
 Sodium bromide.  
 Potass. iodide.  
 F. e. gossypium.  
 Vin. colchici sem.?

## CHEMISTRY.

1. (a) What is meant by the term chemical affinity? (b) When are substances said to be incompatible? (c) Name an example to illustrate each.

2. How can the presence of iron in glycerin be detected?

3. Give characteristic test for free iodine in solution.

4. What is the source of (a) acid citric, (b) acid tannic, (c) acid tartaric, (d) acid oxalic, (e) acid boric?

5. Give a chemical test to distinguish ammonium bromide from potassium bromide.

6. Describe (a) phosphorus, (b) chlorine, (c) sulphur. (d) How are they found in nature?

7. Define (a) acid, (b) alkali, (c) state the difference between a ferrous and a ferric salt, (d) between a sulphide, sulphite and a sulphate.

8. (a) Name four corrosive acids, (b) state what their salts are called.

9. (a) What is an element? (b) About how many of them? (c) Name one that is a solid, one a liquid and one a gas.

10. (a) What is the difference between distillation and sublimation? (b) Write the names of the following: HNO<sub>3</sub>, KClO<sub>3</sub>, HCl, H<sub>2</sub>SO<sub>4</sub>, HgCl<sub>2</sub>.

## MATERIA MEDICA.

1. Give habitat of (a) ergot, (b) ipecac, (c) digitalis, (d) buchu, (e) senega.

2. Give botanical name of (a) aconite, (b) ladies' slipper, (c) henbane, (d) black cohosh, (e) digitalis, (f) peppermint.

3. What are the ingredients in (a) Basham's mixture, (b) neutral mixture, (c) citrate magnesia, (d) comp. liq. powder, (e) blue mass?

4. Write the common name of (a) myristica, (b) spigelia, (c) marrubium, (d) eupatorium perfoliatum, (e) triticum repens, (f) taraxacum, (g) quercus alba, (h) krameria, (i) ol. theobroma, (j) succus limonis.

5. What part is used of (a) anisum, (b) viburnum prunifolium, (c) ecballium elaterium, (d) antheimia, (e) papaver somniferum.

6. (a) From what is opium obtained? (b) What per cent. of morphia should it contain? (c) Name three liquid preparations. (d) Give the dose of the three named. (e) Name its alkaloidal salt most generally used. (f) What is the dose of that salt?

7. Give official names of (a) Rochelle salt, (b) blood root, (c) carbolic acid, (d) tartar emetic, (e) yellow wax, (f) blue cohosh, (g) mandrake.

8. What are the medicinal properties of (a) potass. iodide, (b) ipecac, (c) strychnine, (d) hoarhound, (e) cod liver oil, (f) cascara sagrada, (g) boric acid?

9. Give antidote for poisoning by (a) aconite, (b) morphia, (c) arsenic, (d) corrosive sublimate, (e) oxalic acid.

10. Name a drug in common use obtained (a) from a vegetable source, (b) from an animal source, (c) from a mineral source (c) State what each is used for in medicine.



## Advertising Aid, how, when, and where to Advertise.

PRACTICAL HINTS AND SUGGESTIONS. CRITICISM AND CONSTRUCTION OF ADVERTISEMENTS.

In Charge of Ulysses G. Manning.

The department editor will be pleased to criticise any advertisements submitted and to suggest improvements. Questions answered and advice given. Our readers are cordially invited to avail themselves of this help.

### SPACE, POSITION AND DISPLAY.

**S**EVERAL druggists who contemplate newspaper advertising this year have asked how much space they should use. No definite rule can be given, as there are several things to consider in the matter. The first is cost.

#### HOW MUCH TO SPEND.

I advise new advertisers to put from 1 to 2 per cent. of their gross sales into advertising. As they gain in experience and skill they can increase their appropriation. It will be well to remember that good advertising is not an expense, but an investment, and that the more invested the larger returns will be. But until you are sure that you are doing good advertising a conservative course will be wise.

Therefore a perfectly safe plan is to determine just how much you can afford to spend as an experiment and then strive to make this fund reach as far as possible.

#### HOW MUCH SPACE.

In determining the amount of space to use other considerations frequently enter: The size of your store, the volume of business and the ads. of your competitors. The larger the store or business, the more help employed, the larger the ad. should usually be. The size of the ad. itself may have an influence, as the following will illustrate:

Suppose there were three dry goods houses in a town and that the stocks, facilities and volume of business of the three were about equal. Let two of these houses use quarter page ads. and the third 4 or 5 inches single column. Were you, unacquainted with the facts in the case, called on to form an opinion of the stores from a survey of the local papers, what would your conclusions be?

People naturally expect the size of the

ad. to bear some relation to the size of the business.

If, however, your competitors use no space at all, this feature need not be considered. If they use a little space and you can afford more, take it, and secure the advantage that the larger space affords. If you have been an advertiser long enough to feel sure of your ground, don't be afraid of large space. Use just as much as you can keep filled with interesting and effective matter.

The almost unanimous opinion of those who know most about advertising is that when a small space pays, a large one will pay more than proportionately better.

#### THE QUESTION OF POSITION.

After space comes the important question of position. A small ad. in a good position is frequently worth more than a large one in an obscure corner of the paper. As most druggists use a moderate amount of space only, the question of position becomes an important one. In many cases position can be had for the asking; in more cases for the insisting, and, where neither of these avail, the payment of an additional 10 or 15 per cent. will get it. It is usually worth what it costs for a small advertiser.

#### WHAT IS GOOD POSITION.

The best pages in the smaller weeklies and dailies are apt to be the ones bearing the local news or editorial comment. The best position is top of column next to reading matter. The next best is as near the top as you can get—always next to reading.

When you take up a paper your eye goes to the top of the page. It is where you look for headlines—where you usually commence to read. An ad. up there is apt to get in the range of vision about as many times as there are columns of reading matter.

With your ad. next to reading matter

the peruser of the paper has to brush against it as he travels down the column, and is liable to absorb some of its information whether or not he gives it a careful reading. Having secured your space, let it be understood that the position is to be unchanged.

#### DISPLAY.

With your space chosen, study your surroundings and endeavor to make your ad. distinctive in some way. It will be simply a matter of contrast. If borders are scarce in the paper use one. If the other advertisers employ borders largely, don't use one, but have your ad. set with plenty of white space around it. A distinctive style of setting should be maintained. Have something about the ad.—border, setting of firm name or catch phrase—remain unchanged so that people can recognize your ad. at a glance. The very sameness about some feature helps to attract attention when you change the matter of the ad. The eyes of even casual readers receive some sort of an impression. The arrangement of types, borders, etc., becomes at least a faintly recorded image. Let a change take place. The eye detects something wrong. An inquiry is instituted.

Suppose you daily pass a man who habitually wears a black necktie. This may go on for weeks or months, and you scarcely notice him. One day he appears with a scarlet tie. Then your attention is attracted. You see not only the tie, but the man. If, by the time you have become used to the change, he flashes out in green, you can make up your mind that he is one of the objects you are going to see hereafter whether you will or not.

### COMMENT AND CRITICISM.

#### ADVERTISING IN A CUT RATE TOWN.

W. A. T. says: "I send copy of paper containing my ad. and ask you to kindly criticise same and make suggestions as to its improvement. Our town has 15,000 population, is near the city of —, and contains seven drug stores. I began advertising 14 months ago, and find that my trade has increased somewhat. I have not given advertising much attention until lately. A cut rate war exists here and the various stores are endeavoring to undersell one another."

Three other druggists advertise, and the paper has grouped all the ads. in one column. It would be well for "W. A. T." to either change his location or strive to make his ad. so conspicuous as to completely overshadow the others. In its present position it is bound to lose some of its value through proximity to the others. This ad. is the largest, stands at the head of the column, and is the best of the three; but owing to similar style of setting, the reader is apt to wander on down the column.

It would be a good plan to change the space to 8 inches double column and put a border around it. Then for headlines use the largest type on the page. The body of the ad. can be set in ordinary sized type. Don't attempt to say too

much. The ad. submitted contains enough matter for two.

Don't talk "sassy." This ad. sounds as though it were addressed chiefly to your competitors. It is the public you are after.

#### ADVERTISING CUTTING.

Don't harp on cut prices on patent medicines all the time. If there must be cutting, go to the bottom to begin with. Quote one article at cut rates in each ad., and say that all the rest are sold at like prices. Let a single decisive sentence tell that you are a leader in prices and then talk quality, service—and goods on which you can make something.

Where all competitors are shouting themselves hoarse on cut prices, the man who keeps cool has a chance to make a point by quietly insisting that low prices are a matter of course at his store and that quality of goods and reliability of service are equally a matter of course. Dignity and downright earnestness win in ads., and if you once impress the public with the idea that you are not engaged in the general *mêlée* because you have to, but because you want to, you have gained much.

There is something hysterical about the announcements of many of the cutters that tells plainly enough that they would like mighty well to be doing something else. People may not reason it out, but they will feel instinctively the insincerity, just the same.

#### DON'T ADVERTISE YOUR COMPETITORS.

If you must cut prices and advertise them, do it as though there was not a competitor in the world. Ignore every one. If you let anything creep into your ads. that sounds as though some one was worrying you, you have made a mistake. You direct attention to your rival—to his ad. perhaps—and that's bad judgment.

Hope need not die when cutting begins. It is not as serious as it looks if you meet it firmly. A condition that levels the profits on an important portion of your stock may be a serious menace for a time, but does not necessarily presage ruin. It means, first of all, that you must sell other things as hard as you can. Cutting has been the making of some stores—lifted them out of a rut and awakened dormant capacities. It has been found that stores could live and thrive with "patents" left out of the question entirely. Cut rates have the effect of stimulating trade to a small extent, and by judicious management this can be made to help the sale of the entire stock.

#### DON'T CUT IF YOU CAN HELP IT.

Not that I advise cutting. Far from it! Cutting is a two-edged sword and is a dangerous weapon at best, and has often involved all parties concerned in common ruin. I simply believe that its evils are exaggerated and that it is often ruinous because druggists believe that it must be.

Setting aside my wishes in the matter, my convictions are that the evil will never be overcome. Efforts to suppress it are in opposition to natural laws—to laws of trade—and in the end will be as futile as an effort to make water run up hill. Its continuance in spite of all efforts to suppress it is a harbinger, it seems to me, of new conditions in the drug trade. The tendency of the times is toward smaller profits and larger volume of sales, toward the annihilation of the small dealer and the upbuilding of

the large one. The drug business has been affected last on account of its professional features; but I doubt if it will long escape.

However much we may deplore this, we must face conditions as we find them. There are too many drug stores. Competition is doing its worst. What is the end likely to be? Whatever changes come, advertising is to be an important factor, just as it has been in other lines. Those who master its principles now need have little fear of the changing time.

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#### CIRCULAR ADVERTISING.

R. H. Venable, Louisville, Ky., sends copies of two circulars—one distributed when he opened his store, the other some time later. The chief defect of these circulars is the quality of paper employed. It is but ordinary print paper, and as the matter is rather crowded the circulars are not as attractive as they should be. The talks are fairly good, though too much ground is covered.

Circulars to be most effective should not attempt to tell about the whole store. It is better to take one department or feature at a time and leave the rest for other circulars to be distributed at short intervals. Mr. Venable makes a special point of the neatness of his store. This is right, for there are a lot of things that go with neatness that are especially desirable in a drug store. A neat store demands a neat circular, and a little extra expense in this direction will always pay. The circular confined to prescriptions and soda water is the better of the two.

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#### PENNSYLVANIA ADVERTISING.

The City Drug Store, York, Pa., sends a circular, a newspaper ad. and a folder. The folder is the best of the three. It consists of four pages on tinted cardboard. It contains almost too much matter, and would have been better had the attack on patent medicines been omitted. To state that patents are sold at cost, then attack them, and follow it up with the information that you recommend a line of your own remedies, all in the same breath, may create an impression that the advertiser did not anticipate.

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#### A HOLIDAY ADVERTISEMENT.

Dr. W. A. Wright, Barnesville, Ga., submits a holiday ad. for criticism. This advertiser has a first-class position on local page, and his ad. is the most conspicuous in the paper. He uses a striking border, the ad. is well set and I am sure that all the readers saw it. It is rather too general in character, but has little else in it to criticize.

When so heavy a border is used around a double column space it is well to allow at least  $\frac{1}{2}$  inch of white space around the ad. I would suggest a still larger head line, with the body of the ad. in smaller type. This would make the head line more prominent by contrast and the saving of space would permit the white margin. Headings can be set in two lines if necessary.

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Considerable matter is at hand for criticism in the next issue.

Owing to the amount of material sent in, correspondents must not look for a reply under a month's time. Matter for critical comment receives attention in

the order in which it arrives. I am glad to see it come, and will give it attention as early as possible.

#### Humor in Advertising Signs.

Twenty-third street had its usual crowd of holiday shoppers, says the New York Press. All was bright and merry, and pretty things filled every window. Into the throng of happy people there came a tramp clad in the miserable rags of his order. He had a woeful expression and he was evidently mingling in the crowd to see sights which would remind him of the time when he, too, bought presents for loved ones. The crowd drew away from him.

"The fools! they think I want to beg, and even grudge me a chance to see a smile," he muttered; "but I shall make them laugh for my own pleasure."

He came near a trunk store, and in a heavy, husky voice read aloud the placard posted on the trunk: "This size for \$5."

"So do I," he added.

The crowd laughed and listened.

"Ladies and gentlemen, there's more humor in signs than in funny papers," he said. "Look at that one in Sixth avenue: 'Suits pressed while you wait for a dollar.' Let's all wait."

But they didn't. The people followed the tramp as he sauntered up the avenue.

"Git on to his nibs with the fur lined throat," was the comment of a boot-black.

"How clever; awfully so, don't you know. It must be Walter Jones, parading as Weary Raggles," said a matinee girl to her youthful escort. "Let's hear what he says, Willie. Your mamma won't care if we are a little late. Oh, now he's going to talk again."

"Here's a type written notice," began the fellow, as he scanned a sheet of paper tacked near the foot of a steep stairway, "and it reads, 'Hands wanted on ladies' garments. Apply at room No. 15, fourth floor, back.'"

The matinee girl bit her lip, the men smiled and the street gamin shouted, "Youse can't get a job there, Pop."

"'Divided skirts for ladies with wheels'" was the next sign he read, and with a wink at Mary and John, who were holding hands, he added, "They've all got 'em."

Then a book store window attracted his attention. "Now, here's a firm stocked up with books, and surely they know how to write their signs. Let's gaze into their window. 'A little life of Napoleon on the inside.' 'All Dickens in seven volumes.' 'Tennyson in a box for \$2.'"

But the crowd didn't take to books, he noticed, so he continued his walk, reading aloud such signs as these: "Dress suits to hire." "Shoes repaired while you wait." "Teeth pulled while you wait." "A—a—a—" he hesitated, and nudged the man nearest to him and walked on. It was not a long sign, and read: "Get the lady to manicure your nails for a quarter."

A policeman came along and was about to scatter the people, but changed his mind and smiled with the others when the tramp read in his happiest style the sign over the music store, "Musical instruments playing a thousand tunes at factory prices." Above the store was a stock broker's office. The letters in his sign were of enamel, and, as so often happens, one letter had dropped from its place on the window glass. All laughed

when the tramp read: "Money loaned on socks."

Next the tramp looked into a chop house window, but said he didn't care to eat, for the sign on the window read: "Half fresh mackerel 20 cents."

Adjoining the restaurant there was a store occupied by a dealer in sanitary woolen undergarments, and in the window there was a dummy, dressed in a moustache and a combination suit. A glass plate, on which was printed "Notary Public," hanging from the figure's arm, caught the tramp's eye. "I wonder when he was appointed."

Looking at a large canvas stretched across the front of a dry goods store the tramp read, "\$1 here equals \$3 elsewhere," and then he added: "Let's go elsewhere and get the two. But hold, here is a superfluous use of words: 'Wild geese feathers marked down.' I wonder what you would mark feathers if you didn't mark 'em down."

"Beefsteak John keeps this place. This place keeps Beefsteak John," was the next sign that Raggles pointed out to the crowd, and then they gathered in front of a paper store. In one window a string of paper dolls hung ready to be dressed in paper dresses, while across the plate glass, just under the row of tiny figures, enameled letters spelled this word: "Stationery." The tramp said: "It's a good thing they are in this part of the town, or they'd be kept moving."

### Druggists' Rubber Sundries.

Cheap goods are beginning to menace the druggists' sundries trade, according to a prominent New York druggist. "The discounts which different concerns quote to us," he said, "vary all the way from 80 to 90 per cent. on what purport to be the same goods. Of course we know this to be impossible, but there are always beginners in the drug business who don't know how to judge of rubber goods, and there are always beginners in the buying of such goods for consumption, and these naturally are caught by the cheaper prices. Then the dry goods stores are helping to injure the trade in druggists' sundries, by buying large quantities of goods at 80 per cent., or similar discounts, that are necessarily of poor quality. This explains why the department stores can offer one-quart fountain syringes at 89 cents, while our price is nearer \$1, and was until lately \$1.25. We keep samples of these low-priced goods in stock, however. When a customer talks about being able to buy so cheaply elsewhere, we say, 'Here is what you can get for that price,' and then we bring out a cheap hot-water bottle, for instance, and show how easily the handle may be torn off. Then we ask the customer to pull with full force on the handle of a good water-bottle. The difference is plain, and we generally make a sale of the good article."

#### CLOTH HOT-WATER BAGS.

One result of the cheapening of hot-water bottles, on account of the constant pressure of competition, has been the weakening of the bags, says *The India Rubber World*, not only with respect to handles which come off, but also at the seams and generally all over. This is apt to lead, in the opinion of one druggist interviewed, to the general adoption of waterproofed-cloth bags. "I sell a few of these already," he continued, "and I expect to sell more. In fact, the

manufacturers will be forced to come to their use. In no other way can a hot-water bottle be made so strong, at the edges and elsewhere, as by the use of a good quality of cloth. Then, with a cheaper quality of rubber, a stronger bag can be made than is possible with the use of the best rubber without the cloth. There is no need of stretching in such articles, and elasticity may be left out of account, which permits of the use of cloth. Formerly I thought that cloth bags would not be soft or yielding enough—and they are apt to be rather stiff before use—but my customers tell me that when filled with hot water the cloth bag becomes as soft as could be desired, and that the water seems to retain its heat longer. By the way, I have had an interesting experience in this line. Some time ago the discovery was made, in the sub-cellar of a certain store, of 4,000 cloth water bottles which had been made fourteen years before by the Hodgman Rubber Company. I retailed these goods at a special sale, and out of the whole lot, I believe that less than a half dozen came back to me with complaints. Those were really first-class goods. In the intervening years there have been some cloth bags made, but few in comparison with the rubber bags. But in three years more, for the reasons I have given, I shall expect to see most of the hot-water bottles made of cloth."

#### APPEARANCES DECEPTIVE.

In druggists' sundries, as in some other lines of rubber goods, it is not always possible to judge of quality by appearances. A striking example of this is to be found in the red rubber water-bottles which have been in the market for a dozen years or more. When well made they have proved to be a singularly desirable line of goods—soft, durable, and attractive in appearance. They have been rather high-priced, but one can afford to pay well for a hot-water bottle that gives good service for six years. The trouble about these colored rubber bottles, however, according to an uptown dealer, is in the lack of uniformity of results from vulcanizing the goods. "An exceptionally well-cured lot of them," he said, "might be followed by a lot looking equally well, but liable to fall apart after a few weeks' use. Two firms doing a good business in the manufacture of druggists' sundries have been putting these goods on the market, but one of them, on account of the unsatisfactory results attained by everybody in the business, has lately discontinued their output."

#### IS THERE MONEY IN RUBBER SUNDRIES.

Does it pay druggists to make a special effort to sell rubber sundries? In answer to this query the manager of a store on the west side of New York replied: "As for our own experience, I can say that since we separated our rubber goods from our general stock, four years ago, and devoted a special floor to them, our average daily sales in that department have increased just twelve-fold. Our whole business has also increased meanwhile, but at no such rate as in our rubber line. One advantage of having rubber sundries in stock separately is that the ladies—who lead by a large majority in the buying of such goods—may make their selections with less publicity than in the general store. Here we have the advantage of more privacy and a good arrangement of goods with a view to their display; a lady assistant is kept on

the floor; and we make it a point to carry no goods that we cannot recommend. It should be mentioned also that our store is in the center of an important shopping district. After we have become satisfied with a line of goods for which we have a considerable demand, we order them marked with our name, and many orders come to us through the advertising thus gained by the house. Not long ago an exporting firm in this city received an order from Japan for water-bottles from our house, which we can explain only on the supposition that goods bearing our trade-mark must have been carried by a traveler to that country."

#### ENORMOUS GROWTH OF THE TRADE.

The articles in most general demand in druggists' sundries are fountain syringes and hot-water bottles. While it would seem, to a druggist constantly making sales of such goods, that every individual in the land must have been supplied by this time with a fountain syringe and a hot-water bottle, now and then a person wanders into a New York drug store who never before heard of one. One retail druggist reports having sold a weekly average, for three years past, of one gross of one-quart fountain syringes of a single make. This would make a total in a year of 7,488 quart syringes, besides the other sizes and makes sold from the same store. The house referred to sells about fifty fountain syringes to one bulb syringe for the same purposes. In hot-water bottles, one-quart and two-quart sizes are most in demand, though they are also made in sizes up to six quarts, and in smaller numbers down to "000," which holds about two ounces. The latter is for the application of hot water to the eye or ear. Lately there has been introduced a crescent-shaped "bottle" for the application of hot water to the throat, which has been well received.

#### PRESCRIBED BY PHYSICIANS.

Doubtless the influence of the medical profession has greatly promoted the sale of druggists' sundries. Many articles in this line are sold on physicians' prescriptions, and probably many more are bought upon the recommendation of a physician, without the formality of a prescription. When the advantages from the use of a given rubber article once become known in a household, not only will a future demand exist for it there, but a knowledge of the facts is likely to spread among the friends of the family. In this way the people are rapidly becoming educated in the use of rubber sundries from the drug store. It could not be learned that any New York druggist systematically distributes advertising matter in relation to rubber goods. As everybody knows, they do not use the advertising columns of the newspapers except now and then for some specific remedy.

#### RED RUBBER GOODS.

As to the discontinuance of the manufacture of red rubber druggists' sundries, the president of the company above referred to said: "It is not proper to say that we have made up our minds definitely on the subject. Red rubber goods are a 'risky' class, and for that reason more money must be charged for them, but we have always made it a point to replace any goods which proved unsatisfactory. It is only by charging a good price that we have been able to thus guarantee these goods and the price in many cases has interfered with their sale. But if we should receive to-morrow an order of sufficient size for red hot-

water bottles we should manufacture the goods." With regard to cloth bags for water bottles, the same speaker said that his firm had not found lately any change in the relative proportion of orders received for the cloth bags and the pure rubber.

#### NO EXPORT TRADE.

"Have you made any efforts to build up an export trade in druggists' sundries?" a leading manufacturer was asked. "We have made such efforts," was the answer, "and have met with some success. The success has not been large, however, compared with what can be done in our own country. It is chiefly a question of wages. If we pay three times as much for wages as is paid in Europe, naturally we cannot compete as a general thing with the Europeans in foreign countries. We do well to retain the American market for ourselves. This we do only by the employment of active traveling salesmen and the expenditure of money in different ways. Even then all that saves us from greater competition on the part of European manufacturers of druggists' sundries is the fact that we are nearer to the dealers, and that we welcome small orders which a factory on the other side would not care to handle. This convenience in replenishing stocks promptly and in orders of any size to suit the druggist is a great convenience to the trade, and forms a barrier against a larger import business."

#### A Word for the Salesmen.

English buyers have a very systematic method of treating with salesmen who call upon them with a view to selling a bill of goods. They set apart a certain portion of the day or the week to the reception of the traveling man, when he can show his samples and make his little speech. To further expedite matters, these buyers, as a rule, ask their visitors if they are carrying any new goods and if so they look over the samples of such, and buy or not, as suits them. Should it happen that the drummer has nothing novel, the buyer refers to a memorandum kept for the purpose to ascertain whether a replenishment of the stock is necessary, and if needed orders it at once without keeping his visitor waiting for a decision, as is so often done in this country. Then, again, our English friends allow out-of-town salesmen to call on them outside of the hours fixed for those who can conveniently abide by the rule. When the buyer is busily engaged he will immediately inform his caller of the fact and appoint a meeting that will cause no inconvenience to himself or loss of money or time to the drummer. Best of all, the buyer is always very punctilious in keeping such engagements, and unless something unforeseen occurs will never disappoint the salesman or keep him waiting. Doubtless there are many buyers in this country who are equally as punctual and methodical, but, from the number of letters sent us by roadmen complaining of ill treatment at the hands of the persons in question we cannot help but feel that there is plenty of room for improvement in this respect.

#### SUGGESTIONS TO CRANKY BUYERS.

Cranky buyers, as a rule, are men of very little experience outside their own office, and have no road experience whatever. This class of buyers do not consider the time of a salesman worth anything,

while it is equally as valuable in proportion as theirs.

Buyers who are courteous, considering a salesman's time worth something, and accord him a hearing, let it be ever so short, will seven times out of ten buy goods cheaper and better than if they allowed the salesman to hang around for hours, and sometimes days, before affording him a hearing or a chance to see him in regard to his goods.

If a salesman has a job or inside deal of any kind he will never offer it to the cranky buyer or to the one who kept him hanging around for hours. The price of goods to such buyers generally advances according to the time the salesman has been waiting for an audience. These are facts, but many buyers don't know it.

It is just as easy for a buyer to tell the salesman at 8.30 Monday morning, after an interview of five minutes, that he does not wish any of his goods, as it is to say the same thing Thursday or Friday of the same week.

By so doing he affords the salesman an opportunity to make two or three other towns, and perhaps sell many bills, thus earning his salary and at the same time making money for the house he represents.

#### POLITENESS.

Politeness is one of the cheapest commodities in the world, and the buyer who dispenses it with a lavish hand is always sure to make friends among salesmen, who are willing to aid him in every possible way. He will also be serving the best interests of his employer, who, as our correspondent points out, is always benefited by dealing properly with the commercial traveler. The latter is but human and should not be looked upon as an interloper in any sense of the word. "Live and let live" should be the motto of all, as each is dependent on the other. Without making mutual concessions both will be sure to lose golden opportunities that can never be recalled.—*Iron Age*.

#### European Advertising.

Europeans don't go in for advertising to anything like the extent that Americans do. But they take the shine right off Americans for original schemes to attract attention to their shop windows. In London, Paris and the larger cities in Belgium the shopkeepers are continually devising catchy advertisements. Shoe dealers, hatters, safe makers and men in various mercantile lines do the business up best, but the confectioners, pastry men and other small merchants are not a long way behind them. A shoe dealer in Brussels, who makes a specialty of a water proof shoe, keeps a pair of the shoes standing in a pan of water in his window all day long. The water comes just up to the top of the soles, and the public are respectfully invited at all times to step up and feel the inside of the shoes and see that they are perfectly dry. Another shoe dealer in London made a specialty of shoes for bus drivers, and his greatest claim for them was that they were unusually warm. He kept a pair of shoes embedded in a cake of ice in his shop window, and any one could walk in and feel the inside of them and feel that they were warm. A hatter in Antwerp who manufactures a water proof silk hat keeps one of them in his shop window suspended over a pan, with a stream of water running over it. In Paris a firm of safe makers employed two men to stand in the window of their place all day and hammer on the

lock of one of their safes with huge sledge hammers. Every confectioner in Paris who goes in for window advertising at all has a big Eiffel tower of candy in his window; but fine as the Parisian displays are, they are not nearly so handsome as those in Brussels. The amount of cake and candy which is wasted in window decoration in the big Belgian cities is amazing.

#### Placing an Advertisement.

The placing of an advertisement in an ordinary New York newspaper is a simple and easy process, but when that paper is printed in German it is a different matter altogether. An advertiser can cross the threshold of an American newspaper at 4.08 with his "copy" in his hand and pass under the wire with a receipt at 4.04½. But when he enters a German office and makes known his desire to the man at the desk he is subjected to a close scrutiny, and if it is found impossible to dissuade him from his purpose the advertisement is handed to the regular astronomer and conveyed by the latter to the chamber of science in the upper story. The Reichstag assembles in the great council hall to discuss the best means of keeping the advertisement out of the paper. All this time the would-be advertiser remains on a bench in the outer office. As soon as the astronomer has completed his calculations of the exact number of lines in the advertisement and made other estimates bearing upon the matter in hand, he submits his charts to the Reichstag and goes downstairs to cast the horoscope of the advertiser. Before any further steps can be taken skilled accountants must verify his figures, and when this is done satisfactorily the sages in council assembled prepare a manifesto covering every point of the case and place it in the hands of the Bismarck on the ground floor. Then the latter puts on the black cap, summons the advertiser before him and passes sentence to the effect that the advertisement will cost \$2.88 for one insertion, \$6.31 for two insertions and \$27.63 for a whole week.—*The N. Y. Journal*.

An English exchange refers to the custom of a retailer who hires a column in his local newspaper for the publication of the following announcement, which is printed at the top of the column, the remainder of the column being left blank:

JOHN H. SMITH, PHARMACEUTICAL CHEMIST, BRIDGE STREET, CONTRACTED WITH THE PROPRIETORS FOR THIS COLUMN TO ADVERTISE THE LOW PRICES OF HIS PURE DRUGS, AND, THOUGH HE HAS TO PAY FOR IT, AT THE LAST MOMENT HE HAS DECIDED NOT TO FILL IT, AS BY DOING SO HIS COMPETITORS WOULD GET TO KNOW HIS LOW PRICES.

P. S.—THE PUBLIC ALREADY KNOW THEM.

Probably not 50 people know that the drawing by Mr. Du Maurier which has been the most widely circulated is the only one that does not bear his signature. It is one that millions of people have seen and are still seeing every day without ever suspecting whose the drawing is, and it has been seen by millions of people who never even heard of Mr. Du Maurier's name. The drawing in question is the picture of the bubbling spring which decorates the label of every bottle of Apollinaris water.—*The Bookman*.





## THE NEWS OF THE FORTNIGHT.

### Boxes and Cartage.

The failure of the scheme to inaugurate a system of charges for box and cartage seems to be assured. One Boston house declined to enter the agreement, and this, together with the vigorous protests from the retail trade, some of which appeared in the columns of the *AMERICAN DRUGGIST*, was sufficient to defeat the project, at least for the present.

### Legislative.

The New York College of Pharmacy discussed the proposed change in the poison law for the State, and appointed a committee to draft a new law.

Representative Crisp of Georgia has introduced into Congress the bills for the reorganization of the pharmaceutical service of the United States Army and Navy and also of the Marine hospitals. These bills are now known as H. R. Bills, Nos. 1,662, 1,663 and 1,664. They have been introduced in the Senate by Senator Bacon. The bills affecting the Army and the Navy have already been printed in these columns. (See the issue for October 10, 1895, page 282, and for November 25, 1895, page 315.) We have received the assurance of the Hon. A. J. Cummings, former chairman of the House Committee on Naval Affairs that he will give the bills his active support.

### Associations.

The Apothecaries' Guild of Boston and vicinity has kept alive the interest of its members in the organization, and in the outlying towns schedules of prices have been adopted which yield a little profit on proprietaries, and which moreover have the advantage that they bring about absolute uniformity of price on these goods. Mr. Jaynes, the big cutter of Boston, announces in a newspaper "interview" that the action of the Guild has been highly beneficial to his business, but within a few days of the publication his attorney writes a warning letter to the Guild stating that "any annoyance and injury that your Guild has already caused in its persistent endeavors to injure Mr. Jaynes in his business he has

borne patiently." Which of the two is correct, Mr. Jaynes or Mr. Jaynes' lawyer? Mr. Flynn, president of the Guild, takes pains to point out that the object of the Guild is to benefit Mr. Jaynes in common with all pharmacists.

### Boards.

The Illinois Board of Pharmacy keeps ever to the front. Now 35 true bills have been found (page 82) by the Grand Jury against pharmacists of Chicago. Siegel, Cooper & Co., the large department store merchants, are defendants in two cases.

### Deaths.

Dr. J. C. Krieger, one of the best known and most highly esteemed of the pharmacists of Cincinnati, is dead, and our Cincinnati correspondent gives an extended obituary notice of Dr. Krieger in his letter.

### Box and Cartage Dead.

The credit, if so it can be denominated, of nullifying the efforts of the Box and Cartage Committee of the National Wholesale Druggists' Association, of which Frank Faxon of Kansas City, Mo., is the chairman, toward extending box and cartage charges east of Pittsburgh, can be laid, it is said, at the door of Weeks & Potter of Boston.

It will be remembered that when Mr. Faxon and his committee left this city for the West a few weeks ago quite a hopeful feeling was manifested concerning some united action on the charges, and the general feeling was that the trade here would agree on a charge of perhaps 50 per cent. of the actual cost of the package.

To settle the question definitely there was a meeting early in the present month of the Jobbing Drug Committee of the Board of Trade and Transportation at its rooms. Before much discussion had taken place, a communication from Secretary Fred. Carter of the New England Drug Exchange was read. Mr. Carter wrote to the effect that on account of a disagreement among some of the members the Exchange had found itself unable to put the plan of charging box and cartage in force. The firm which had utterly refused to make the charge was, it was said, that of Weeks & Potter. As might have been imagined, the news was something of a shock to those members of the committee which had hoped to carry through the plan.

Addresses were made by several of the members, who held that the failure of the plan in the Eastern States made it

practically impossible to put it in force here. A New York State druggist could not be discriminated against in favor of a New Englander, and if customers were not treated alike there was likely to be trouble, leaving aside all question as to the fairness of such methods. Nothing was said against the adoption of the plan itself, but the expediency of it at the present time was the main argument.

It was finally decided to lay the matter on the table, but competent members of the committee held that this disposition of it practically settles the question finally as far as the East is concerned.

"And I don't know that it's a matter to be regretted," said a big wholesaler the other day. "The honorable houses would have suffered, for the others would have evaded their obligations and failed to charge. It would only have provided a new method of fighting your competitors dishonestly, and there are houses in the trade that would have descended to it."

## NEW YORK.

W. O. Allison, proprietor of the *Druggists' Circular*, has been elected an associate of the American Chemical Society.

The Morningside Pharmacy has been opened at 118th street and Eighth avenue. Joseph P. Carroll is manager of the store.

W. C. Depew of J. L. Lyons & Co., New Orleans, has been in New York buying goods.

J. Fred Doty, manager of the Mattson Rubber Company, expects to make a business trip to the West this month.

Paul Engemann, formerly with Lehn & Fink, is now with McKenzie Brothers & Hill, the well-known essential oil dealers, in the capacity of salesman.

F. W. Towne & Co. have a very attractive window display of "Frog in your Throat?" in their store at Weirfield street and Bushwick avenue, Brooklyn.

The New York Store Fixture Company will soon put a new set of fixtures in J. H. Legett's pharmacy, at Plainfield, N. J.

James E. Davis of Williams, Davis, Brooks & Co., Detroit, spent a portion of the holidays at the Imperial Hotel, New York, with his son and daughter.

A. W. Weeks, representing Fox, Fultz & Co., leaves the city January 12 to visit the trade in New Jersey, where he expects to do a land office business.

W. A. Morrison of the firm of Morrison & Hefley, Waco, Texas, has been spending a short time in Philadelphia and New York recently buying goods.

By a fire that occurred on December 28, J. J. V. O'Connor & Co., druggists, of 585 Ninth avenue, had his premises and stock damaged about \$6,000 worth.

The annual meeting of the Drug Trade Section of the Board of Trade and Transportation, for the election of officers, takes place on the 16th inst.

Recent visitors to the city were George Lamping, Waterbury, Conn.; W. H. Quinn, Ballston, N. Y., and Euclide J. Brunette, Saratoga.

Charles Loeber of Bedford Park, N. Y., is making extensive alterations in his store, and is having the New York Store Fixture Company put in attractive quartered oak fixtures.

E. E. Riggs will soon put new fixtures into his store, at Trenton, N. J., which will be supplied by the New York Store Fixture Company, who have fitted out several pharmacies in that city recently.

The big illuminated thermometer in front of Hudnut's downtown pharmacy, at 205 Broadway, was blown down and smashed in the wind storm that shook the city on the December 26.

One of the cleverest of all the new year greetings sent out by the drug trade was that of Merck & Co. Verbatim it read as follows: "January, '96. Here are both our hands for 1896! Merck & Co. To our friends."

Visitors to the trade have been few during the holidays, during which the most exciting topic has been stock taking. This species of amusement is not yet concluded in many establishments, many being still hard at work upon it.

Dr. Hoffmann, formerly editor of the *Pharmaceutische Rundschau*, sailed for Europe by the North German Lloyd's line on the 4th inst. He goes for rest and recreation, and will be absent about eight months.

The premises of Geo. Wasson, the well known drug broker, at 116 John street, were accidentally set on fire a few days ago, necessitating the calling out of the fire department. The fire was subdued before much damage was done.

W. D. Corcoran's pharmacy at 1370 Trenton avenue, has been appointed a Post Office sub-station. The selection of Mr. Corcoran's store as a sub-station is a wise one, as it is conveniently located and is well known in the vicinity.

Almost all of Lehn & Fink's travelers have returned to the road. Messrs. Blitz, Soltan and Fick have started for the West; Mr. Hinkston is touring New York State; Mr. Martin is back in Pennsylvania, and Mr. Lamp has been welcomed to his territory, the New England States.

Miss Sadie Sullivan, who was at one time cashier at Hageman's, has been engaged to handle the checks and cash at Hudnut's downtown establishment. Besides being unusually attractive and genial, Miss Sullivan is said to be one of the smartest and quickest cashiers in the city.

E. A. Aronstamm, 105th street and Third avenue, is having marble counters, a new prescription counter and new show cases placed in the store by the New York Store Fixture Company. A good business is carried on at this pharmacy, and it is one of the most popular drug stores in upper New York.

A. L. Hatch, representing Fox, Fultz & Co., was busily engaged New Year's week filling his trunk with a new line of fresh samples preparatory to starting on trip No. 1, 1896, which Mr. Hatch expects to be a record beater. He will visit the trade in Pennsylvania, Maryland, West Virginia and Ohio.

On December 31, John P. Sutherland, for 20 years a member of the firm of Ward, Sutherland & Co., 128 and 130 William street, and one of the oldest drug merchants in this city, died at his Brooklyn home, 488 Classon avenue. He was 74 years old and leaves a widow and five children.

The Chas. N. Crittenton Company an-

nounce that they have been appointed agents for the Vinolia preparations manufactured by Blondeau & Co., London. No changes have been made in prices.

E. F. Stout, who has represented Ladd & Coffin in New York State for the past seven years, will hereafter look after the interests of Williams, Davis, Brooks & Co. in this section. The success which the Dabrook perfumes have already met with in New York will, no doubt, be much augmented by the enlistment of Mr. Stout.

John Guerdon, for many years in the drug business in St. Louis, is now in the East as special representative for malt nutritine, the Anheuser-Busch new specialty. Mr. Guerdon is active in Boston at present, but took time to make a trip to New York during the holidays. He saw the town in the company of Hugo Soltan, Lehn & Fink's well known representatives, and "there were others."

Robert J. Seabury of Henry K. Wampole & Co. of Philadelphia, has opened an office in this city where he will devote his time and attention entirely to pushing the export trade of all of the house's sterling preparations. Mr. Seabury's geniality is pleasantly inclosed in room 111 of the Morris Building, corner of Broad and Beaver streets, and there he is evolving new ideas daily to push the Wampole goods in every part of both the civilized and uncivilized world.

There are very few New York creditors of Singer & Wilson, the wholesale druggists of Peoria, Ill., who were closed up by the sheriff on the 2d inst., and whose liabilities are placed at \$200,000. Lehn & Fink are among the mourners, and yet, as they figure their loss at but \$1.72, they think they will manage to recoup in some way. The principal creditors are in the West, and include banks and dealers in druggists' sundries, liquors and cigars.

Kenton Coates, a druggist, at 318 West 118th street, this city, was held for the grand jury in the Lee Avenue Court, Brooklyn, for striking Policeman Schilling of the Bedford avenue station, in the face, on the sidewalk, in front of the Hotel Wellington at Broadway and Dunham place. Schilling's nose was broken and his left eye discolored. When arraigned in court Mr. Coates expressed sorrow for his exploit, and Schilling also said he didn't believe that the druggist meant to hurt him.

Alderman E. Alexander Houston of Yonkers, who is the leading pharmacist in that town, planned a pleasant surprise for the Mayor and his fellow aldermen at the meeting of the Council on the day before New Year's. The Alderman makes a fine brand of cologne. When the members took their seats, each found upon his desk a good sized bottle of the Alderman's cologne. The bottles were neatly wrapped and held by light blue ribbons. On the outside of each was a card bearing the Alderman's name and the words "A Happy New Year—Compliments of E. Alexander Houston."

The action of the American Pharmaceutical Association in endeavoring to better the condition of the military, naval and hospital pharmacists, is being appreciated by those gentlemen. Wm. H. Meyers, Ph.G., apothecary of the U. S. Navy, on board the "Vermont," recently wrote for information

on the subject to G. J. Seabury. In his answer Mr. Seabury wrote: "I am an uncompromising advocate of giving all three classes named the rank of an officer, with his pay, which will be that at least of a first lieutenant. If you fail to receive this recognition from Congress it will be no fault of yours truly."

The sympathy of the trade has gone out to Mr. Rogers of Rogers & Pyatt, on the sudden death of his father, Andrew B. Rogers, on December 29. Mr. Rogers' death was most unusual. He lived with his family at 25 Abingdon square, and attended services at the Bedford street Baptist Church, of which he was a member nearly all his life, besides being one of the leaders of the Bible Class. With the congregation he had started singing, "Nearer, My God, to Thee," when suddenly, without any warning, he fell to the floor. Those about him thought that he had merely fainted, but he died of heart failure before medical aid could be summoned. Mr. Rogers was 70 years old, and leaves a widow and two sons. He was employed in the Union Dime Savings Bank, was a Volunteer Fireman, and an active Republican, though he had never held public office.

#### A POPULAR DRUMMER.

J. F. Haynes, the rolly-poly lump of good nature and sunshine, who bowls about the country in the interests of Lehn & Fink, drug importers of New York, was in town to day on his tri-weekly visitation. It is said among the trade that Mr. Haynes sells more goods in Poughkeepsie than all the other drug drummers put together. This from the Poughkeepsie *Evening Enterprise*.

#### COLLEGE NOTES.

At the special meeting of the New York College of Pharmacy, on December 30, with Thomas F. Main in the chair, a motion was unanimously carried that the president appoint a committee, consisting of the four professors and three members of the college (all to be retail druggists at present in business) to draft a new poison law, and submit it at the next stated meeting of the college, in January.

Probably the most complicated class yell of any college in the country is that adopted by the class of '96, New York College of Pharmacy, which runs like this: "Para mido anisol—phenolphthalein terpinol—benzol—creosol delphinine—argon aurum atropine—funca—acus—lea—mastiches—N. Y. C. P. '96."

The following committees have been appointed by M. J. Coats, president of the senior class; Glee Club, Orrin F. Ives, A. Deutschberger, Joseph C. Becker, Adolf Imhof, John G. Miller; Flag Committee, Miss Eleanor Aschenbach, Miss Julia Lawall and Miss Madge O'Connor. The flag adopted by the senior class is of blue and gold and bears the figures '96 upon it.

The first annual reception and ball of the Alumni Society will be given in the Banquet Hall of Madison Square Garden, on Wednesday evening, January 22. The Committee of Arrangements consists of Messrs. Julius Taunelbaum, chairman; William A. Ebbitt, Adolph Henning, George C. Diekman, M.D.; Arthur C. Searles, Ewen McIntyre, John Oehler, William A. Hoburg, Jr.; Rudolph Gies and Thomas M. Davis.



**Fulton Club Reception.**

The fifth New Year's reception of the Fulton Club took place Saturday, December 28. The New Year's reception was given thus early, first, because it was Saturday afternoon, and, second, because many of the members belong to uptown clubs, and were pretty busy on December 31 and January 1. The programme of entertainment included comic singing, humorous stories, banjo playing, piano recitations and champagne. The menu started off with consommé in cups and wound up with punch, sandwiching about everything edible to be had in town.

Among those present were: Joseph C. Baldwin, Thomas Barrett, George P. Benjamin, Eugene G. Blackford, R. E. Bonner, S. W. Bowne, William Brookfield, Edward B. Brown, H. P. Carrington, Harry Holbrook, Jr.; Mark Hoyt, E. W. Ketcham, George W. Ketcham, John McKesson, Jr.; Herman C. Mechling, Frank L. Montague, Jordan L. Mott, David D. Otis, Henry B. Platt, Runyon Pyatt, Theodore Ricksecker, Milton Robbins, George C. Smith, Orison B. Smith, Ormond G. Smith, William F. Smith, John H. Sprague, William C. Trageser, Frederick W. Tuttle, Clifton W. Wharton, Jr.; Charles S. Whitney, W. Hull Wickham, Albert Winter and Charles L. Gilpin.

**Smuggling at Niagara Falls.**

NIAGARA FALLS, N. Y., January 4.—It has just been discovered that adulterated phenacetine in the form of acetanilid has been brought into this country through this port in large quantities.

A recent large consignment was examined and passed at New York by the Government chemist, where it was certified to as genuine phenacetine, but a later examination showed clearly that it was acetanilid. The shippers sent the stuff to Rochester, but realizing they were watched they have not dared to call for it.

**CONNECTICUT.****LECTURE BY PROFESSOR MADISON.**

NEW HAVEN, January 6.—A public lecture on chemistry was delivered at the Y. M. C. A., Bridgeport, recently, by Wm. H. Madison, Ph.G., the well known druggist of the same city. He took for his subject "The Chemistry of Some Common Things." After briefly outlining the methods of ascertaining the composition of matter at the disposal of the chemist, the lecturer showed how elements were detected in the photosphere of the sun by the means of the spectroscope. This was followed by an account of the synthetic production of some of the more important commercial substances, for example, alcohol, oil of wintergreen and so forth. By means of apparatus contrived by Mr. Madison acetylene produced by the decomposition of calcium carbide was burned, the electric lights with which the room was illuminated paling into insignificance beside the new light. The remainder of the lecture was devoted to a consideration of some of the operations in every day life, such as dyeing, bleaching, brewing, tanning and so forth. The lecture was elucidated throughout by experiments of the most interesting kind. Professor Madison was well received, and held the attention of his audience from beginning to end, and upon its completion he re-

ceived numerous requests for another on kindred topics.

**THE GRAY LIQUOR CASE.**

Druggist Mason P. Gray of Mystic was recently tried for violations of the liquor law on four different counts. It was the intention of the judge to give Gray a jail sentence, but his attorney pleaded so hard in behalf of his family that he was fined \$200 and costs amounting to \$102.80 instead. But this fine was only imposed after Gray promised to get out of the business and stay out. The judge cautioned Gray that the other counts were not to be nolleed or erased from the docket, as if the accused was ever brought before him again on a similar charge he would be tried on the old counts as well.

**GRAY'S FATHER GETS LEAVE TO OPEN.**

Shortly after this case was disposed of, Dr. Gray, father of the convicted druggist, had his counsel ask the court what his rights were in the place formerly occupied by his son. The father complained that he was deprived of his right to use the store as an office and drug store in his practice of medicine. Counsel wanted to know if it was so that a legitimate business had to be abandoned. Judge Noyes said he could conceive no objection to the father entering the drug business, and accordingly the doctor has reopened the store for business.

**REFUSED A LIQUOR LICENSE.**

The Stafford Drug Company, recently organized at Stafford Springs, has been refused a liquor license. This is the company Dr. La Bonte and Howard North of Ansonia are interested in. Pending their application before the commissioners, 20 or so of the leading citizens of the town petitioned the officials not to grant this application. The petitioners said that the company was formed as a drug company to introduce a liquor business in a no licensed place. Dr. La Bonte and Howard North of the company appeared before the commissioners and stated that the firm intended to conduct a legitimate drug business, and wanted the license as a necessary adjunct. Lawyer Reed opposed the granting of the license on legal grounds. He said that according to the statutes of Connecticut a physician is criminally liable who writes a prescription for liquor to be purchased in a store in which he was a partner. The commissioners finally decided against the company. The firm intend locating in Stafford Springs notwithstanding the decision, and later on will make a determined effort to secure the license.

**CHAMPION SKATERS.**

Walter Torrance of the Hogan Drug Company of Derby is one of the speediest skaters in that city. He has a rival in the person of Manager John Murphy of the Holian Inn, and so during the recent skating period a race was arranged between the two star performers. One of the articles of agreement was that each competitor should wear 29 cent skates. They started, they fell and they finished. But Druggist Torrance reached the coveted goal first and he was declared the winner. It was a great race.

**News Notes.**

The directors of the Apothecaries' Hall Company of Waterbury held a meeting recently and elected F. B. Rice president of the company, to fill the vacancy caused by the death of L. I. Munson.

John K. Cook, formerly with Nichols & Harris, New London, is now connected with Moon's Pharmacy, in the same city.

W. Marx, connected with Pixley's Drug Store, at Wallingford, has returned after a pleasant stay in the South. He visited the Atlanta Exposition while there.

Hall & Loomis are about to open a drug store on Grand avenue, New Haven. Mr. Loomis was formerly located on State street, in the same city.

William McEnerney, brother of Druggist McEnerney of Ansonia, has entered the employ of the General Electric Company, at Schenectady, N. Y., as an electrical engineer. He is a recent graduate of Yale.

George Smith of the People's Drug Store, at Seymour, presented to each one of the local physicians a useful pocket knife as a Christmas remembrance. The medical men returned their thanks to the generous druggist.

One of the most handsome and commodious pharmacies in Waterbury was recently opened by Charles A. Briggs, at the corner of West Main and North Willow streets. Mr. Briggs formerly was located in Brooklyn, a suburb of the Brass City.

William Sayles has purchased the stock, fixtures and good will of the estate of B. M. Beebe, druggist, 222 Bank street, New London, from Charles B. Whittlesey, trustee. Mr. Sayles has for the past seven years been with C. C. Lippitt and will refit and restock the store.

Miss Bessie Augusta Abbott of Bethel and Herbert Kinner of the City Hall Pharmacy, Danbury, were married at the home of the bride's parents, at Bethel recently. The best man was Edward M. Keeler, another druggist of Danbury, and Miss Mamie Crofut of Bethel was bridesmaid.

L. F. Hawley, formerly with the Park Drug Company, Hartford, has branched out for himself and opened one of the handsomest places in the Capitol City, at the corner of High and Main streets. His establishment is adorned by one of the latest style fountains manufactured by the Low Art Tile Company of Boston.

Richard B. Healey, the druggist, at 119 Chapel street, New Haven, and Miss May, daughter of Patrolman Ahern, were married in St. Mary's Church on New Year's morning. Thomas B. Healey, a brother of the groom, also a druggist, was the best man. A reception followed the ceremony, at their newly furnished house, at 115 Chapel street.

Druggist Wingood of Ansonia has filled the place left vacant by the retirement of Mr. Osborne. The new clerk is Mr. McCarthy, a licensed pharmacist. Immediately after former Clerk Osborne left the store Druggist Wingood was nearly overwhelmed by applications for the vacancy by young men who desired to learn the business. Mr. Wingood said he was greatly surprised at the number.

A funny sight was witnessed at Springfield recently. A drug clerk rushing along the street had the misfortune to drop the gallon jug which he was carrying, and there was hardly a dry eye in the crowd who were near when the mishap occurred. This apparent sympathy was not for the clerk or for the loss of the contents of the jug, for it was not anything drinkable, but concentrated ammonia that was spilled.

## MASSACHUSETTS.

Boston, January 5.—An important meeting of the Apothecaries' Guild of Boston and vicinity was held at Young's Hotel on the 8d inst. The attendance was the largest of any meeting up to that time and there was an abundance of enthusiasm. President Flynn was in the chair as usual, and after a brief opening called upon Assistant Secretary Flynn to read the records of the last meeting. These were subsequently approved, as was the report of Treasurer Godding, which showed a balance of \$181.78.

## PRICE SCHEDULE INDORSED.

President Flynn said that the Guild had arrived at a point where 500 druggists of Boston and its suburbs had expressed a desire for a schedule, which was to do away with cutting. He deplored the fact that a few were standing in the way of a fair profit, but said that this would cause no wavering in the Guild's policy, and that the effort would yet be pushed to a successful issue. L. H. Smith then submitted the report of the Committee on Schedule of Prices. This schedule was printed in the last issue. The schedule was indorsed by the members.

## ALL BUT EIGHT SIGN.

Agent Reeves said that 450 signers had been secured to the proposed schedule. The druggists visited included those in Boston and vicinity and extended from Brockton to Lynn. The number of druggists who refused to sign made the very small minority of eight. Some of these say that they will sign when Jaynes' signature is secured. Mr. Reeves thought the department stores could be depended upon to sign, in accordance with their promise of some months ago. The speaker thought that the outstanding manufacturers would soon desire to identify themselves with the movement. They would eventually find it to their benefit to do so. Mr. Reeves urged his hearers to take up the fight; the officers had done their work well and brought it to a point where it should receive the support of every retailer.

At the last meeting of the Guild some action was taken looking to securing permanent headquarters, and George W. Cobb, for the committee having charge of that matter, reported progress and the committee was given further time.

President Flynn then referred to the recent advertisement of C. P. Jaynes in the daily papers. Some of the members called for the reading of the "ad." and secretary G. W. Flynn complied by reading "Jaynes' interview with himself."

The following letter was then read :

## A LAWYER'S LETTER.

Boston, January 2, 1896.

MY DEAR SIR:

A circular sent to the members of your Guild over your signature contains statements that threaten an injury to the business of my client, Chas. P. Jaynes, by attacking articles which he sells and in which he is interested. As the Guild is apparently to discuss the merits and demerits of such articles to-morrow afternoon, I write to give you notice that any action taken by your Guild, or any notice sent by you as president, or by any of the officers or directors of your company, that shall tend in any way by implication or otherwise to injure Mr. Jaynes or his business will be followed by summary proceedings on his part to protect himself.

The annoyance and injury that your Guild has already caused in its persistent endeavors to injure Mr. Jaynes in his business, he has borne patiently; but now, however much he may regret it, he must have such attempts to interfere

with his personal rights stopped, and such interference ended.

Yours very respectfully,

CHAS. T. GALLAGHER,

Attorney for C. P. Jaynes.

C. P. FLYNN, Esq.,

President of the Apothecaries' Guild,  
Andrew Square, South Boston.

President Flynn then read his reply.

## PRESIDENT FLYNN'S REPLY.

Boston, January 3, 1896.

CHAS. T. GALLAGHER, Esq.

MY DEAR SIR:

A circular was sent to the members of the Apothecaries' Guild over my signature, as you inform me, and I have no reason for denying the fact.

It does not contain statements that threaten any injury to the business of Charles P. Jaynes, and it attacks no interest which he has in any articles; but your letter does inform me that Lung Kuro and the Hub Lung Protectors are articles in which Mr. Jaynes is interested. This is news to me, and I am glad to be informed of it on the authority of his counsel. I assure you that I will inform the members of the Guild as fully as you inform me.

I cannot help noting that in the first paragraph of your letter you accuse the Guild or me, I am not sure which, of an intention to attack your client's goods, but I will do you the justice of admitting that you correct your mistake in the second sentence of your letter, and acknowledge that we only intend to discuss the merits, if there be any merits, and the demerits, if there be any, of the goods which your client, or you, or anybody else may undertake to advertise as a panacea. If it should injure your client to have the community know that Lung Kuro is not what it is advertised to be, I can't help it, and I am sure the Guild can't help it. We intend to conduct our meetings according to our by-laws, and in the interest of our profession, and we sincerely trust that whatever we do will be done to elevate our calling, and to assist the commonwealth in the protection of its citizens against quacks and quackery.

I do not know, and I do not believe the Guild which I have the honor to represent as president, has caused any injury to Mr. Jaynes in his business; on the contrary, the purpose of the Guild is to assist Mr. Jaynes and everybody else in our profession. We have made no attempts to interfere with his personal rights, and we intend to make none. On the other hand, Mr. Jaynes and yourself must both be aware of the fact that we have no intention of allowing any one to interfere with us in the exercise of our rights as citizens, or as druggists, or as members of an association formed for purposes legal, proper and manifestly beneficial to the community in which we live.

Very respectfully yours,

C. P. FLYNN,

President Apothecaries' Guild.

## DRUGGISTS MAY DECLINE TO SELL ANYTHING THEY CHOOSE.

A general discussion then ensued as to the rights of druggists in refusing to sell preparations which from any cause they do not care to handle. It was conceded that it was proper for a druggist to so refuse, and at the end of the discussion it was apparent that at least two articles now on the market could not be conveniently handled by those present.

President Canning of the League then spoke of his stand some months ago, concerning a certain three-cornered production, and was glad to see the members in accord with the views he then expressed. Mr. Cobb thought there were other preparations which it would be well to relegate to the rear. He said that certain manufacturers had insulted the representatives of the Union and thought the members should know of the fact.

## WORK OF THE DORCHESTER SOCIETY.

Mr. Green, president of the newly formed Dorchester Society, sketched the work of that association, referring in detail to its schedule. He was a pleasing and enthusiastic speaker and his ideas met with warm support.

Reference was then made to co operative manufacturing, but it was thought best not to consider it at this time.

Treasurer Cobb of the N. E. R. D. U. then spoke of the finances of that body. The funds had recently been swelled by these contributions: \$200 from the

Apothecaries' Guild; \$100 from Cutler Bros., and \$100 from Weeks & Potter. Between \$400 and \$500 was now in the treasury.

Mr. Emerson of Haverhill was the next speaker. He was glad that the friends and enemies of the retailer were known. He spoke of the great responsibilities resting upon druggists, which were more onerous than that of any other calling. These responsibilities entitled the druggist to the support of the community and obtaining of a fair profit. He advocated the adoption of a schedule, as customers were more easily satisfied than when trading under cut rates. At the close of Mr. Emerson's address he received the hearty applause which he deserved.

## GOOD PRICES BEING OBTAINED IN LOWELL.

F. H. Butler, Ph.G., said that the Guild had done good work for Lowell druggists and that satisfactory prices were now being obtained.

E. C. Marshall, Ph.G., urged a resumption of the schedule of prices, and cited an illustration of how goods could be sold for more than cut prices. He expressed his willingness to adopt a schedule and thought the increased interest showed that others were ready to do likewise. He pledged \$25 if needed for legal expenses. Mr. Cobb said that as the next meeting was the annual, he would move that a committee of three be appointed to bring in a list of officers. This was adopted and the chair appointed Messrs. Canning, Durkee and Orne on this committee.

## ACTING UNDER LEGAL ADVICE.

The discussion then turned upon the matter of legal advice, and it was learned that every step which the Guild had taken was approved by the Guild's counsel and in his opinion wholly within the law. Mr. Canning thought the opposition would push the matter from a legal standpoint and in that event he was ready to assist from a monetary standpoint.

Mr. Durkee gave the movement his hearty indorsement and pledged his support. He thought it ought not to be forgotten that this movement owed its inception to the M. S. P. A., and he trusted that future meetings of that association would show from the standpoint of attendance that the work was appreciated.

## A CURIOSITY IN THE WAY OF AN ADVERTISEMENT.

One of the curiosities which druggists of the present day will add to their collections for future reference came to light since my last letter. It was an "ad." not a little one, but a whole column, on the first page of the daily papers, and its cost must have spoiled the profits of its sponsor for many a day. This "ad." was in the shape of an alleged interview between a reporter who figured in the types as "Rep." and the proprietor of a certain drug store, who is not a member of the Guild. The theme was the alleged villainy on the part of the above organization in attempting to interfere with the conduct of this proprietor's business, but, alas! according to the story, the plot had failed, his business was flourishing, he was serving the public at cut rates and recommending his own remedies as of yore. It took a long time to tell the story, and history does not state whether or not the results were satisfactory. If it was intended to disturb the equanimity of retailers it failed to accomplish its purpose.

**Massachusetts Notes.**

Canning & Patch have dissolved partnership. Mr. Canning will continue at 109 Green street.

The Low Art Tile Company have recently shipped a fountain to the new Stafford Drug Company, Stafford Springs, Conn.

C. S. Bulfinch and Waldon & Vaughn, both of Lynn, have recently purchased hot soda fountains from the Low Art Tile Company.

Horace B. Childs has opened a new store on Dorchester avenue and has fitted it with a new Low Art Tile Fountain.

A recent visit to the factory of James W. Tufts disclosed a full force busily employed. Mr. Tufts reports that there have been few Januaries when the outlook was more promising for a satisfactory trade. A new retail drug business has been incorporated at Worcester, under the name of the Whittier Drug Company. The capital stock is \$3,500 and the officers are George M. Woodward, president; John J. Whittier, treasurer; George T. Woodward, John J. Whittier and George M. Woodward, directors.

### Preliminary Examination of Pharmacy Students in Quebec.

The preliminary Board of Examiners of the Pharmaceutical Association of the Province of Quebec held their quarterly examinations in Montreal and Quebec on Thursday, January 2, 1896, 17 candidates presenting themselves in Montreal and four in Quebec. Of these the following passed upon all subjects, namely: Henri Massecocte, John J. Weinfeld, J. A. Choquette and Sterling Whiteside. Two of the candidates failed on history, namely: J. Bte. Bisillon and Louis Mayer, and will be required to present themselves again for that subject only.

The case of one of the candidates has been referred to the Council for consideration.

The examiners were Prof. A. Leblond de Brumath and Prof. Isaac Gammell.

The next examination will be held on April 2. Candidates must file their applications to the secretary, Mr. E. Muir, at least ten days prior to that date.

### The Maine Commission of Pharmacy.

At the last meeting of the Maine Commission of Pharmacy, held in Portland, the following applicants for registration were successful: Harry F. Smith, John U. Otis, W. J. Aulbach and R. A. Somers, Portland, and Howard P. Cheney, Deering.

The following applicants were granted certificates as "qualified assistants": Archie L. Tufts, Westbrook; E. H. Whitney, Sabattus; D. K. Allen, Fairfield; B. Frank Dudley, Milltown.

If a sufficient number of applications are filed from the eastern portion of the State the commission will hold its next meeting in Bangor; otherwise it will be held in Portland as usual. In view of this fact all those from the eastern part of the State who contemplate coming up for examination should notify the secretary, Frank R. Partridge, Augusta, of this intention as soon as possible.

**PENNSYLVANIA.**

PHILADELPHIA, January 5. — The street railway strike in this city during the week before Christmas had a bad effect on all business, especially upon the retail druggist who had stocked his store with various toilet articles such as usually find a ready market during the holidays. The drug stores in the center of the city suffered the most and many of them were big losers by the inability of the shoppers to get to the business section.

The old saying, "It's an ill wind," etc., is apropos in this case, as the stores in the outlying sections were better patronized than they usually are, and while the strike lasted they did a far better business than they otherwise would. Many druggists had to lay in larger supplies, and one well known Ph.G. did three times the business he generally does.

The drug stores were more tastefully arranged than ever before, and the druggists, instead of trying to make enough from one sale to last them a year, entered into competition with other stores and in this way did a better business.

**CLEVER ADVERTISING.**

Hance Bros. & White are about the best advertised firm in this section of the country. For several years past their specialty, "Frog in your Throat?" has been given the widest publicity, and wherever it has been thought advisable the cough tablets were widely advertised. Early last year the firm distributed a number of frogs with each package of "Frog in your Throat?" and for the best arranged display of these frogs a prize was offered. This caused considerable rivalry and also occasioned a big increase in the sales of these goods. This year the firm has something new, which is nothing more nor less than a Christmas tree. This tree is placed in the window of the drug store and it is trimmed with such articles as the firm supplies. Some of the trees are decorated with considerable taste by the druggist and they give a bright and cheery look to the store. Even some of the wholesale houses have the tree on exhibition.

**THE BUSINESS OUTLOOK.**

Eighteen hundred and ninety-five was by no means a banner year, although the majority of the wholesale drug houses in this city state that their business was better than it was in 1894. The year just passed was an unusual one in regard to setbacks. It seemed that just as the business showed a good undertone, a setback occurred which caused considerable uneasiness. The beginning of 1896 was somewhat clouded, as there was a hesitancy among the retailers about giving orders, and for the first week the trade was very dull. This state of affairs did not seem to worry the large houses, as it gave them an opportunity to take account of stock. While the trade has at times been depressed there has been very little financial trouble. Of course some dealers were forced to the wall, but as the number was very small it had little effect. Many firms, however, complain of collections, which they state are very bad. It is thought that as soon as the January interests are paid money will be easier and business will be better.

**SHOEMAKER & BUSCH SUCCEED GEORGE WETHERILL & CO.**

George D. Wetherill & Co., one of the oldest drug houses in this city, have sold out the drug business to Shoemaker & Busch. The house of Wetherill was established in 1807 and for many years it was among the leaders of this city. Of late the firm have been paying more attention to other lines, and it was deemed advisable to part with the drug business. As soon as this became known Shoemaker & Busch entered into negotiations with the house and the outcome was that the entire drug stock and good will was purchased by them. The firm of George D. Wetherill & Co. are to continue at the old place, 56 North Front street, where the business of manufacturing white lead, whiting, paints, colors, putty and varnish, and importing and dealing in window glass, brushes and all painters' supplies is to receive more attention than ever.

The giving up of the drug business by this house created some surprise, but it only goes to show that the drug business of this city is being confined to a very small number of houses. This firm had capital, but the members were of the opinion that it would be advisable to drop the drug portion and push their paint business. The firm of Shoemaker & Busch who purchased the drug stock are one of the most enterprising and pushing houses in this city. This firm are well thought of, and they do an immense business throughout the South. They are very aggressive, and during the last few years have built up a largely increased business.

**THE AFFAIRS OF THE LAPP DRUG COMPANY.**

A number of months ago the Lapp Drug Company made an assignment. At that time it was stated that the assets were more than enough to meet all liabilities and that speedy settlement would soon ensue. The assignee's sale was held some time ago, and while the assignee has a year to make all settlements there are some creditors who think that the defunct company will not be able to pay anywhere near the amount that was first stated. It is believed that when the settlement is made the creditors will not get much more than 50 cents on the dollar.

**THE BOX AND CARTAGE CHARGE.**

Contrary to expectations the box and cartage agreement did not go into effect on January 1, and from present symptoms it is thought that the charges as contemplated will not be made. A few weeks ago a committee of Western drug houses visited the principal cities of the East to get the leading houses to enter into an agreement to make a charge for boxing goods and for the carting of them to the depot. A number of the houses in this city were averse to entering into an agreement of this kind and were only prevailed upon to sign the agreement if all the drug houses of the East would do likewise. It was thought that it would be impossible to get the New York houses to agree, but contrary to all expectations they signed the agreement. Boston did likewise and each city appointed a committee to act in the matter. In this city it was agreed to make the charges nominal—that is, to charge the buyer only for the cost of boxing and for the hauling. The latter item met with considerable resistance, as many of the wholesale

druggists were averse to making any charge for delivering the goods at terminal points. As the wholesale druggists here had agreed to make these charges there was nothing to do but to put them into effect, and a circular was prepared which was to have been sent to all the retailers announcing the charges.

Before the circular was sent out word was received to hold them back. This caused some surprise until it was learned that a house in Boston had refused to sign the agreement. It is not known what will be done in the matter at this writing, but unless the house which refuses to become a party to the agreement changes its mind, there is not much likelihood of the charges being made. A committee is at work with this house, but it is thought it will not be successful.

#### MR. MARIS BACK FROM EUROPE.

Henry J. Maris, of the firm of John M. Maris & Co., has returned from a six weeks' trip through England, Germany, Bohemia and France. Mr. Maris' trip was purely a business one, and he feels elated with the success that attended him wherever he went. In Germany he found business very good and some of the manufacturers were loth to take new orders. In Bohemia he made a contract for a large number of decorated bottles. These bottles are very fine and will be an attraction in themselves. Besides this he has secured a large amount of druggist sundries, glassware and porcelain. These goods are expected very soon now, and as the firm intends to pay more attention to this line than ever before preparations are being made for a big display. In speaking of the business for 1895 Mr. Maris said it was the heaviest they have ever done. When this firm moved from its building on Market street, west of Seventh, to the present location it was thought that there would be no trouble as regarded room. It appears, however, that "more room" is still the cry, and another building is to be secured which is to be used as a storage house. Theodore Maris, who had full charge of the business while his brother was away, was ably assisted by the well known and respected George Smythe.

#### THE DETROIT PLAN.

The Detroit plan is meeting with considerable success, and it is thought that enough proprietary manufacturers will have consented to abide by it to make it a go. The committee is still at work, and the reports received from them are encouraging.

#### Notes of the Trade.

Theodore Maris, who has been confined to his home with a severe cold, is now able to be at the office.

Robert Shoemaker & Co., wholesale druggists, of Philadelphia, are making extensive alterations in their store fitting it up.

Prof. Edward Kremers of Madison, Wis., and Prof. Chas. Caspari of Baltimore were visitors to the College of Pharmacy during the previous week.

A. A. Weber, who lately purchased the drug store at Ninth and Locust streets, has made a number of changes, which has given the store a brighter and more cheerful appearance.

Miss S. L. Naly, class of '95, P. C. P., formerly apothecary at the Woman's

Hospital, Philadelphia, has purchased a drug store at the corner of Eighteenth street and Pennsylvania avenue, Denver, Col.

Since Mr. Wingert purchased Snyder's drug store at Girard and Ridge avenues he has completely changed its appearance and has greatly added to its popularity. He has a beautiful soda fountain, and during the cold weather he furnishes a large number of hot drinks.

Charles Hires Company have now a handsome suite of rooms in the Bourse Building. Notwithstanding the cold weather the manufacture of Hires' root beer is being pushed, as it is thought the business this year will be greater than ever.

On January 21 the usual pharmaceutical meeting will be held in the College of Pharmacy, at which F. B. Kilmer of New Brunswick, N. J., will present a paper on kola and kolavin. Mr. Kilmer will illustrate his lectures with stereopticon views. There will be also a paper on the influence of certain drugs on the character of the urine by F. W. Hausman; other papers will also be presented, but up to this time they have not been decided upon.

The State Pharmaceutical Examining Board of this State, through its president, Louis Emanuel, has made information against Dr. C. M. Van Sickle and Mrs. M. E. Van Sickle, of Mumball, charging them with acting as managers of a drug store without having the necessary certificate. A separate information is brought against them for allowing Andrew Suiller, an employee, to compound prescriptions without being under the immediate supervision of an authorized manager of a drug store.

#### Bought Out by the J. Ellwood Lee Company.

In a circular issued under date of January 1, the J. Ellwood Lee Company of Conshohocken, Pa., announce the purchase of the entire plaster business of the late Grosvenor & Richards Company of Boston, including their machinery, good will, formulas, copyrights, trademarks, labels, etc.

The J. Ellwood Lee Company have also bought the entire business and rights of J. C. De la Cour of Camden, N. J., maker of a non irritating adhesive plaster whose merits have been known, principally in the South, for more than 40 years. It is made without rubber, and consequently is non irritating.

The J. Ellwood Lee Company say it will be manufactured under the immediate supervision of Mr. De la Cour, who has become a member of the company.

The J. Ellwood Lee Company have just erected a large factory and placed in it a new plaster mill at an estimated cost of \$50,000.

#### A New Pharmacy School in Alabama.

From a recent circular announcement we notice that the trustees of the A. and M. College, at Auburn, Alabama, have established a school of pharmacy as a department of this institution, which school is now organized as a full four years' course. The circular states that the "school is established to enlarge the usefulness of the college by presenting a course of education in which students

may be well qualified for responsible positions in pharmacy, or well grounded for service as manufacturing chemists or analysts, or qualified by education in the natural sciences to enter upon the study of medicine.

#### OHIO.

CINCINNATI, January 5, 1896.—Dr. J. C. Krieger, the well-known doctor and druggist as well as pioneer citizen, died at 4 o'clock on the morning of the 18th ult. The deceased, with his sons, conducted the flourishing drug store at the northeast corner of Court and Vine streets for many years. The deceased had been suffering for about three weeks with an abscess, which later developed septisemia. He was apparently cured of this, however, and appeared to be almost well, when he suffered a stroke of paralysis. This affected his entire left side and deprived him of consciousness. His son and a number of other physicians did all they could to save his life, but their efforts were in vain.

Dr. Krieger was one of the pioneer citizens of Cincinnati and was interested in many public enterprises. He was 62 years old, having been born in Germany, June 15, 1832. At the age of 18 he came to this country and settled in Cincinnati, engaging in the manufacture of machines with his brother. He held many public offices during the early part of his life. He was Assistant Tax Collector for 18 years and for an equal period represented the Twelfth and Thirteenth wards in the Board of Education as a Republican. He was secretary of the Concordia Lodge, Knights of Honor, of which he was one of the founders; an active member of the Pioneer Society of Cincinnati, being its secretary for the five years preceding his death. He was one of the oldest members of the Cincinnati Relief Union, treasurer of German Lodge, I. O. O. F., an active member of Nelson Post, G. A. R.; Judge of Elections in the Nineteenth Ward for a number of years and Assessor of the Thirteenth Ward for 12 years.

In addition to these offices he was for 28 years superintendent of the Sabbath school and organist of St. Paul's German Protestant Church, at the corner of Fifteenth and Race streets. He leaves the following children: Dr. Christ. Krieger, Oscar, a lithographer; Edwin and Miss Kate Krieger, the latter being a graduate of the Cincinnati College of Pharmacy and now in charge of the prescription department of the drug store at Court and Vine streets. The deceased was a gentleman of many admirable qualities of heart and mind, and he had a host of friends who will be deeply grieved at his death.

Dr. Chris. Krieger is one of the best known young physicians of the city.

#### A Few Snap Shots.

S. S. Stewart has opened a new drug store at East Palestine, Ohio.

Karl Rudolph has succeeded G. F. Lynn, at Youngstown, Ohio.

Harry McClelland, New London, has sold out to W. L. Rhoades.

Gaylard Pharmacy, on Erie street, Cleveland.

Holiday trade with the druggists was as good as that of last year.

George Kylius received a horse and buggy from his wife for Christmas.



Dr. Louis Sauer, the West End druggist, is going to the inauguration of Governor Bushnell.

Druggist Daniels, on Central avenue, gave his neat little store a thorough overhauling for Christmas.

The traveling force of Schmidt & Co., the show case manufacturers, has been greatly augmented for the ensuing year.

Matt Yorston, at Twelfth and Central avenue, says his telephone is a pay station, but that it is for the good of humanity.

Louis Voight & Sons are selling more wall paper than they have for many years past. They have a number of new designs.

Dr. Louis A. Haber, the well-known druggist, has just returned from a trip to Atlanta and other points of interest in the South.

Will. S. Wagner, the clever pharmacist at Seventh and Vine streets, has just returned from an extended trip through the North.

Prof. Charles T. P. Fennell is authority for the statement that this will be one of the most prosperous years in the history of the College of Pharmacy.

Henry Miller of Cleveland, proprietor of the Gem Pharmacy, is about to open a branch Gem Pharmacy on Erie street, near St. Cloise.

Herman H. Koehken, the popular pharmacist, at McMillan street and Park avenue, Walnut Hills, has a mortgage on the store at Fourth and Mill streets, which was conducted by Robert Wray.

C. S. Johnson, who has conducted a pharmacy at Carthage for a number of years, has closed out his stock at that place and will engage in business at Greenville, Ohio.

Dr. John C. Otis, who now practices medicine in conjunction with running a first-class drug store, has had a great number of surgical operations to perform during the past six months.

Emil W. Bayer, the popular and well-known Vine street pharmacist, will be one of the graduates at the next commencement exercises at the Ohio Medical College. He will hang out his shingle.

Albert Ross, son of the druggist of that name, at Ninth and Vine streets, has been sued for a divorce by his wife, to whom he was married a short time ago. Neglect and failure to support were the grounds.

F. Suerbaum, the well-known pharmacist, who has been in charge of the prescription department at Bingel's Sycamore street pharmacy for the past 10 or 12 years, is very ill with an attack of pneumonia.

Louis Heister, the widely known druggist, at the southeast corner of Seventh and Elm streets, has one of the best trades in the city. He has gone to Kansas on a business trip. He has extensive interests out there.

Johnny Bauer, the druggist at Sycamore and Milton streets, accompanied the First Regiment on its recent trip to the Atlanta Exposition. Johnny is loud in his praises of the hospitality of the Southern people. He wants to go again.

The Stein, Vogeler Drug Company have named a brand of cigars after the

*Enquirer*. The cigars are on sale in most of the down-town resorts and they are going like the proverbial "hot cakes." Every one praises 'em. The newspaper boys smoke them.

Among the large class which will graduate at the Medical College soon are druggists Ed. Neineman, G. W. Muench and Jacob Troth. We now have a large number of "pill rollers" in the city who write the suffix M.D. after their names.

The Druggists' National Fire Insurance Company is the name of a new fire insurance company which has recently been incorporated under the laws of the State of Ohio. The incorporators are: John Weyer, John Ruppert, Cincinnati; F. T. Bower, Toledo; W. R. Ogier, John Byrne, W. H. Lyfert, Columbus; Robert J. Eads, Indianapolis.

The B. F. Goodrich Company, manufacturers of India rubber, druggists' sundries, Akron, Ohio, are sending out a very cleverly gotten up price-list of the goods manufactured by them. Complete information is given in it as to the style and dimensions of the various tubings, rubber corks, etc., and the book should prove a useful one for a druggist to have for reference.

Grover Cleveland Healy has been stopping at the Grand Hotel for the past two weeks, taking orders for Johnson & Johnson. He tells your correspondent that orders have come in so fast as to use up all his blank order books, and he is now obliged to take orders on any kind of paper that comes to hand. Johnson & Johnson have offered three cash prizes this year, amounting to \$1,000, to the three salesmen selling the most surgical goods bearing the red cross emblem. G. C. H. says he is going to take all of the prizes, and has ordered a new set of "think works."

A few days ago a man giving his name as J. A. Boist, and claiming to hail from Philadelphia, was arrested by the Covington police on the charge of adulterating drugs. The story was that Boist had sold something that he represented to be quinine, but which was much cheaper than that alkaloid. Boist was taken to a police station, but was not held as he said he made no misrepresentations and that all the druggists knew they were buying cinchonidia and not quinine. The case caused considerable talk in drug circles.

Robert G. Wray, the druggist at Fourth and Mill streets, filed a deed of assignment the other day, alleging dull times as the cause of his failure. He conveyed his property in trust to Charles C. Benedict, the attorney, who will administer for the creditors. The assets are placed at \$3,800 and liabilities at \$4,700. Creditors are also preferred in this case by chattel mortgage, one to Kate M. Wray for \$1,100 and the other to Agnes M. Sutphin for \$219.02. The assignee reached the store with his deed of assignment just in time to prevent the levy of an execution.

### A Kentucky Idea.

A decidedly novel invention to prevent jail breaking has been evolved by F. V. Simms, a druggist, of 549 Preston street, Louisville. Mr. Simms would surround prison cells with air tight compartments, filled with carbondioxide under a high

pressure. In these compartments, too, should be small retorts, containing lumps of marble, covered by diluted sulphuric acid. Small rubber balloons, connected with electric batteries, are also an essential, but the main thing is that when the prisoner bores a hole through the wall of the cell he is asphyxiated, while at the same time the balloon will expand, bells will ring, and the turnkeys and keepers will be given warning that something unusual is going on. Whether they will reach the prisoner in time to resuscitate him or whether he will pay for his attempt to regain his liberty by his life, is an open question.

## MICHIGAN.

DETROIT, January 3, 1895.—The Christmas rush is over and last week merchant in all lines were busy trying to figure up the profits, for without exception there were profits of satisfactory dimensions. The down town drug trade as a rule made elaborate displays of novelties in the shape of perfumes and other standard sundries. While there are still a generous assortment left over for another year, still there was a big movement in these articles. Jobbers report that country merchants as well as those in the suburbs of this city, purchased a little heavier than usual this year and the demand appeared to be for a better class of goods.

### TO REPEAL THE FREE ALCOHOL MEASURE.

The great drug, perfume and varnish interests of Detroit were much interested last week in a bill introduced in the House of Representatives at Washington, which provided for the repeal of the section in the Wilson Gorman bill providing for untaxed alcohol for use in the arts and medicine. Notwithstanding the plain intent of Congress to grant free alcohol, at least for use in the arts and in medicine, the manufacturing druggists, varnish makers and other concerns here were compelled to continue the payment of the former tax on the spirit, and litigation was instituted to determine the Secretary's right to ignore the law. What is known as the Sharp & Dohme case, which is still pending, was started in the Court of Claims at Washington to compel the Government to refund the tax paid on alcohol intended for medicinal use. The filing of hundreds of other claims followed, many of them by firms who are opposed to free alcohol, but who, of course, want the tax already paid refunded if the Secretary's action is declared illegal.

### BIG CLAIMS.

An inspection of the docket shows that Parke, Davis & Co. of Detroit have already filed claims aggregating \$65,000, which is probably increased to over \$70,000 by tax on alcohol used to the present date. Frederick Stearns & Co. and other drug and perfume firms here have also filed claims, the total from Detroit perhaps aggregating over \$200,000.

The refunding of this large sum of money would be all clear profit to the interested firms, as the preparations in which the alcohol was used have been sold at prices based on taxed, rather than untaxed alcohol. However, no matter how the legislation over the legality of the tax during the period which has elapsed since the passage of the law terminates, there is a strong

sentiment against free alcohol in the future, and the patent medicine lobby will find a strong opposition when they descend on Washington to oppose the passage of the McMillin bill.

#### All Over Michigan.

George Menold opened a new drug store at Douglass, Mich., on January 1.

The Dunlap Company, not incorporated, succeeds Edwin Dunlap in the drug business at Kalamazoo, Mich.

I. D. Lane, formerly of Sand Beach, Mich., has purchased a drug stock at Butler, Ind.

T. W. Davison of Bay City has purchased the drug stock owned by C. D. Rahl.

Hunter & Park is the name of a new drug firm at Plymouth, Mich. They succeed the firm of Chaffee, Hunter & Laufer.

Thomas Murdock, of the class of '94, University of Michigan, formerly with H. T. Wyatt & Co., Adrian, Mich., has gone into business at Northville, Mich.

Frank Williams, a druggist at Lowell, Mich., has been bound over for trial at Grand Rapids, on the charge of selling liquor illegally.

Leon A. Abbey helped himself to cigars in Sanford's drug store, at Grand Rapids, Mich., and was caught at it. He was fined \$25 and costs.

Burglars entered the back door of Davis's drug store, at Grand Ledge, Mich., and stole \$5 in change besides some goods.

Henry Neville of Menominee, Mich., has started a branch drug store at Wallace. This is a good location as there is no pharmacy in the neighborhood.

The White pharmacy at Tecumseh, Mich., owned by Druggist Beal of Ypsilanti, has been closed and the stock shipped back to the Normal town.

R. A. Abbott, formerly of the drug firm of Tinholt & Abbott, Muskegon, Mich., has opened a new store on Terrace street, in that city. L. M. Mills, representing Plummer & Co. of Chicago, took the order for the stock.

Elmer Prentice, a clerk in the drug store of Wheaton & Goodale, at Battle Creek, last week tried to light a gas jet. The head of the match flew off and set some celluloid goods in the window afire. The loss will amount to \$75.

The old Moll drug stock at Saginaw, Mich., more recently known as the Birney Drug Store, has closed its doors, awaiting a sale of the property in order that the estate of Sarah I. Birney may be settled. The stock and fixtures are intact and the location is considered one of the best in that city.

Fire last week destroyed several business blocks at Charlotte, Mich. Among the losers was H. H. Gage, druggist. The fire burned through the ceiling and the principal damage was done by water. His loss is estimated at \$2,000; insurance \$1,500.

The drug stock which has been owned at Grand Rapids, Mich., by J. G. Jackson, Dr. C. H. White and P. M. Doty, respectively, has passed into the hands of George P. Eddy of Shelby, Mich., who has opened for business under the personal supervision of W. T. Stringman.

C. A. Wilson of Holly, Mich., has sold his drug and book store there to H. M. Church, from whom he originally purchased it about eight years ago. Mr. Wilson was elected cashier of the First State and Savings Bank last May, and will devote his attention to the duties of that office. Mr. Church has taken possession.

The annual meeting of the Grand Rapids, Mich., Pharmaceutical Association was recently held, at which plans for a co operative manufactory were discussed, and a committee appointed to investigate. A report will be made at the next meeting. Officers were elected as follows: President, Will L. White; vice-president, W. K. Schmidt; secretary and treasurer, Benjamin Schronder; trustees, B. E. West, J. D. Muir, J. E. Peck, R. A. McWilliams.

The drug stock of F. D. Baker at Flint, Mich., was recently damaged by fire to the extent of \$1,000; insured.

A triple burial took place recently at Elmwood cemetery, Detroit. It told a silent but sad story. A few years ago Frank M. Sweeney was a trusted employee of Parke, Davis & Co. He went to Jersey City to take a better position. His wife and little boy accompanied him. Scarlet fever visited their happy home and in three days had claimed father, mother and boy. The remains were brought to Detroit.

## ILLINOIS.

### DRUGGISTS INDICTED FOR VIOLATING THE STATE PHARMACY LAW.

F. [M. Schmidt, county member of the State Board of Pharmacy, and Frank Ullrich, his agent employed to investigate the methods of the 950 druggists in Chicago, went before the Grand Jury recently to procure indictments against about 50 druggists, against whom there were 60 charges of violating the State pharmacy law. The evidence collected by Special Agent Ullrich and presented to the Grand Jury resulted in indictments against the following:

F. Keene, 318 Milwaukee avenue.  
J. Brod Chemical Company.  
Hellmuth, 1047 North Robey street.  
William Janney.  
Moeller Bros. & Co., two cases.  
L. Klein, Halsted and Eighteenth streets, two cases.  
Klein Bros., Halsted street, two cases.  
A. O. Selburg.  
Garrison Bros.  
Peter Van Schaack & Sons, three cases.  
W. Dodd Miller.  
George A. Bartran & Co.  
E. H. Rosene.  
D. Burlingham & Co.  
C. F. Glass.  
Kirth & Dougherty.  
Robert Leonard.  
A. C. Musselwhite, three cases.  
Vary & Neff, two cases.  
B. Moynung, 375 Milwaukee avenue.  
Benner Hoeller, 1435 West Madison street.  
J. Exciowski, Milwaukee avenue, three cases.  
A. T. Hubka, 745 South Halsted street, two cases.  
Michel & Pitzele.  
J. F. Wallach.  
Budhiewez.  
Horl. J. Stamm.  
F. Berger.  
John Schocke.  
American Pharmacy, two cases.  
J. W. Reeves, manager.  
Charles J. Herbert & Co.  
Frank Brothers.  
A. E. Coombs, Thirty-eighth and Dearborn streets.  
Siegel, Cooper & Co., two cases.  
Frank E. Mackenzie.

The jury failed to find true bills against the following:

J. W. Tuohy.  
G. W. Bastian.

White Brothers.  
Matthews & Co.  
Schlizer & Thomas.  
J. G. Schauer.

Only two witnesses were summoned before the Grand Jury. They were Fred. M. Schmidt of the State Board of Pharmacy and Frank Ullrich, an employee of the Board, who worked up the cases. The work was under the direction of Mr. Schmidt. The testimony is all direct, both the witnesses having made purchases at the stores, or in other ways procuring the evidence.

The charges are brought under the special act and under the criminal code. The special act governing pharmacies forbids opening a drug store without having a registered pharmacist in charge, selling drugs without labeling them, or carrying on a pharmacy without having a pharmacist's certificate displayed conspicuously in the store. The criminal code covers the selling of certain poisons without registering the customer.

### PHARMACY BOARD FIGHTING ALONG NEW LINES.

"These present charges are the opening gun in a revival of our war against illegal drug selling," said Mr. Schmidt. "We have not been doing much for a year, and now we are going to proceed on different lines. We used to bring our cases up in justice courts, but that has proved unsatisfactory. You know the dilatoriness of the justice courts, and when we did secure convictions it did not amount to much. The druggists were generally willing to pay their fines and go right on violating the law. We concluded to do our work through the State's attorney's office, and we think it will be much more effective. I have no doubt that we can convict every one of those we have charged. In former cases the majority have pleaded guilty. We have worked up these cases very carefully and are sure of them. Mr. Ullrich has gone from place to place under my direction and secured the evidence, and we have discarded all those in which some points were lacking.

"There is no intent of persecution in this. We simply want to enforce the law. There are 904 drug stores in Chicago, and a good big share of them violate it. Some of the department stores have girls selling drugs, and it is evident that that is dangerous to life. The penalties will doubtless be greater than when inflicted by justices, and we hope to break up the illegal practice. We shall keep at it till we do."

### SINGER & WHEELER FAIL.

Singer & Wheeler, wholesale dealers in drugs, at Peoria, have confessed judgment for \$38,000. They are a stock company, and Walter Barker, a stockholder for \$5,000, has applied for a receiver. On November 1 President Singer stated the assets were \$418,000; liabilities, \$118,000. The company succeeded Singer, Wheeler & Co. in 1883, and have a capital stock of \$250,000.

### News Notes.

The C. S. Mather & Sons Company have been incorporated at Chicago, with a capital stock of \$20,000, to manufacture proprietary medicines. Incorporators, A. E. St. John, Edward St. Clair and D. C. Merriam.

The Executive Committee of the Chicago Retail Druggists' Association had a conference with the city collector and passed resolutions to wait on the Mayor

for the purpose of bringing about a better enforcement of the liquor ordinance. The collector will send a deputy around for two purposes, to explain the ordinance to druggists who started in business since the ordinance was passed, and then his deputy picks up evidence. Druggists must register every sale, and cannot allow any liquor to be drunk on the premises, neither for stomach pain nor for flavor in soda water.

## MISSOURI.

St. Louis, January 2.—Several St. Louis pharmacists expected to begin the work of the new year by making up a stock of N. F. preparations according to the revised formulas. They expected the revised edition to make its appearance by December 15, but up to present writing it has not been seen. A few proprietors expected to make a present of a copy to their head clerks for Christmas. Some druggists are pretty good hands at scolding when things don't go to please them, and one or two have been ventilating their opinion pretty thoroughly because of their disappointment. In a few stores the N. F. preparations are running pretty low, as the proprietors are waiting the publication of the new manual before making up stock.

## RUMORS OF ANOTHER WHOLESALE DRUG FIRM CONSOLIDATION.

The surprise and talk about the recent consolidation of wholesale drug firms in this city had scarcely subsided, when it was rumored that another large wholesale firm was about to consolidate with Myer Bros. During the past few weeks prominent officers of the two firms have been seen conferring together. This may be taken for what it is worth. Inquiry of various officers of the two firms as to the truth of the report brought an emphatic denial.

## DRUG CLERKS IN DEMAND.

Not for several years has there been such a demand for drug clerks as is experienced at present in St. Louis. German drug clerks are at a premium. One does not have to look far for the cause. A good share of the senior class at the College of Pharmacy held their positions until the new year. Warned by the experience of others, they knew better than try to clerk while coming in on the homestretch, as they call it. This threw several positions vacant, and at present writing there are several which are not filled. One and two years ago many of the boys held on to their positions during their senior year, and the result was several failed to pass in the spring.

## News Items.

The Allan Pfeffer Mfg. Company, of this city, have changed their name as per affidavit filed at Jefferson City, December 24. Hereafter they will be known as the Allan-Pfeffer Chemical Company.

R. S. Vitt spent the holidays with relatives and friends at Washington, Mo.

Geo. Billerth, Jefferson and Arsenal streets, took a week's hunt in Arkansas about Christmas.

O. H. Fisher, 4161 Easton avenue, spent Christmas confined to his bed. He has been sick for some time.

Thos. S. Glenn, 2338 Washington avenue, celebrated Christmas in grand old Southern style.

W. R. Grant, 8718 Olive street, is just home from the Atlanta Exposition.

## NORTH CAROLINA.

### The Charity Prescription Question Disposed of.

RALEIGH, January 6, 1898. —The special committee on charity prescriptions of the Raleigh Board of Aldermen have submitted their report, which is as follows:

They have carefully examined into the matter and find abuses that can only be remedied by a radical change, they therefore recommend:

1. The abolition of the present system.
2. The election of a city physician who shall furnish and dispense his own medicine at a cost not to exceed \$300 per year.

The adoption of this recommendation will, in our opinion, not only insure to the benefit of the poor of the city by securing better and more thorough attention, but to the taxpayers of the city in saving more than 83% per cent. of the present cost.

There should be exacted of the physician certain requirements, such as a monthly report to the Board of Aldermen of the number of visits made, number of patients treated, number discharged, number of new patients received—ordinance concurring, which can be enacted at the January meeting.

This, we believe, will conduce to the prevention of inattention or neglect to any one.

The report was accepted, and on motion of Alderman Ferrall the following ordinance was adopted unanimously:

### THE NEW ORDINANCE.

Be it ordained by the Board of Aldermen of the City of Raleigh:

1. That a Bureau of Charity be, and the same is hereby established, to be composed of the Mayor and three members of the Board of Aldermen to be nominated by the Board, for the purpose of managing and controlling all appropriations made by the Board of Aldermen for rendering medical assistance to the indigent sick of the City of Raleigh, who may be unable to employ a physician or buy medicine.

2. That the sum of \$300 per annum, to be paid in monthly instalments of \$25.00, be, and the same is hereby appropriated, the same to be expended by said Bureau of Charity for the purposes set forth in section 1 above.

3. That, for the purpose of providing a proper system through which said Board of Charity shall render to the indigent sick of the City of Raleigh the medical assistance named in Section 1 above, the office of city physician be, and the same is hereby established by the Board of Aldermen, which office may be filled by one or more resident physicians of the City of Raleigh, as the Board of Aldermen may from time to time determine upon, to be elected by the Board of Aldermen, and who shall hold office for two years from and after election by the Board. Said city physician (or physicians, as the case may be) shall have an office centrally located within the city, at such place as said Bureau of Charity may designate, and shall keep the same open in such manner and at such times as said Bureau of Charity may direct, and shall render medical assistance to the indigent sick of the City of Raleigh who may be unable to pay a physician or purchase medicine, by examining, visiting, treating, prescribing for, and furnishing medicines to the same in such manner as said Bureau of Charity may direct, and shall perform all such other duties, and render all such other services, as said Bureau of Charity may direct to be performed and rendered. And such city physician failing to perform in a proper manner any duties imposed by this ordinance, or by said Bureau of Charity, or who shall abuse his office, shall forfeit his said office, upon conviction by the Board of Aldermen.

4. That said Bureau of Charity shall have full control and management of the appropriation made in section 2 above, shall direct to whom the same is to be paid, and how the same shall be expended and used, and shall have full power and authority to provide rules and regulations for said city physician (or physicians, as the case may be), including the duties to be performed, and the services to be rendered, and medicines to be furnished by said city physician (or physicians, as the case may be), and shall exercise a general supervision and control over the manner and methods by which the medical assistance provided by this ordinance is rendered to the indigent sick of the City of Raleigh, and shall make quarterly reports to the Board of Aldermen of all disbursements made by or through its direction.

Applications from Drs. James McGee, Jr., G. W. Renn, H. C. Upchurch, J. R. Rogers and A. O. Jones were read. Messrs. Hicks & Rogers, pharmacists, submitted a proposition to fill the prescriptions for \$300, excepting proprietary remedies, and these to be sold at cost.

This practically disposes of the charity prescription question for one year at least, and very probably two years, if the action of the present board is not repealed by its successor.

The druggists of Raleigh have been supplying medicines for charity purposes at a slight profit, and it was customary with many to keep the moneys derived from this source separate and apply it to the payment of taxes, etc. They will hereafter have to get along without this source of revenue.

Drs. McGee and Renn are the physicians' choice for city "apothecary," and an office is now being fitted up for them and stocked with a full line of tablet triturates and compressions. They propose to treat the indigent sick with such tablets almost exclusively.

The two gentlemen who have been selected to fill the office of city "apothecary" are young physicians of Raleigh, and it is the opinion of the druggists of the city that the post will prove a splendid advertisement for them. But the druggists are the losers by the new arrangement.

## Wisconsin Board.

At the meeting of the State Board of Pharmacy held December 13 nine out of 87 applicants received first-grade certificates, as follows: T. E. Greenwood, T. Dorhorst, George Elsner, E. P. Benke Milwaukee; H. Thiemann, Reedsburg; Q. W. Frost, Washburn; W. H. Bodfish, River Falls; P. H. Sharp, Hurley; E. O. Whipple, Waterloo. Sixteen were given second-grade or assistant certificates, as follows: S. C. Czerwinsky, A. A. Rock, J. A. Huennekens, A. E. Haise, S. E. Piasecki, Otto Frank, Paul Enders, Milwaukee; F. A. Detloff, Madison; L. H. Allen, Geneva Junction; J. A. McKenzie, Madison; R. P. Sauerhering, Mayville; A. Bransted, Rice Lake; W. F. Gilley, Watertown; W. F. Kane, Shullsburg; F. Edna Bigelow, Brooklyn; J. W. Scott, Janesville.

## Kansas Board.

The State Board of Pharmacy held a meeting in Junction City, December 11 and 12. Certificates were issued to the following registered pharmacists: Paul Orlopp, Atchison; J. B. Manly, Quenemo; Douglas Miller, Newton; John Crafts, Alma; W. H. Somerier, Winfield; E. G. Graves, Agra; C. L. Lease, Wichita; W. G. Lorew, Marion; W. R. Shoemaker, Frankfort; O. C. Johnson, Cottonwood Falls; C. E. Lynn, Mankato; B. N. Bowen, Atchison; Calhoun Johnson, Leonardville; R. N. Doherty, Belleville; Louis Freibels, Eureka; W. C. Hereford, Parker; H. O. Seitz, Ellsworth; Anthony Sharpe, Axtell; P. M. Richardson, Ellsworth; C. A. Noel, Summerfield; C. S. Stokes, Gueda; J. P. Hazlein, White-water.

Registered assistants: W. J. Littell, Kirwin; R. I. Wood, Abilene; A. W. Systia, Concordia; S. W. Row, Leavenworth.



### Washington State Board of Pharmacy.

At the meeting of the Washington State Board of Pharmacy, held at Spokane on November 18 and 19, there were nine applications for registration, six of whom applied for examination. The examination resulted in the registration of the following: W. H. Stowell of Spokane, C. A. Neyland of Davenport, Ernest Leeson, M.D., of Davenport, Valentine Brasch of Spokane, the last two named as assistants. Certificates were also granted to Oscar C. Godder of Holyoke, Mass., registered in Massachusetts; Charles R. Graham of New Whatcom, registered in Michigan, and Joseph R. Watson of Seattle, graduate of Ontario College of Pharmacy. The next meeting of the board was fixed for February 28, 1896, to be held at Tacoma. Applications should be filed with the secretary, W. H. T. Barnes, Seattle.

### Denver Doings.

Mr. Murphy, the popular clerk at A. G. Clark's pharmacy, is a N. Y. C. P. '85 man.

Jas. Reed, popular as ever, is still at Herrs' pharmacy, where he is always pleased to see a friend.

Mr. Mitchell, city man for J. J. Riethman, is an old Denver druggist and is well liked by all who come in contact with him.

Grebe & Taggart have moved their store from Seventeenth and Center streets, Denver, to 180 North Tejon street, Colorado Springs.

Wm. Dingle, who was one of the "early times" druggists in Denver, we learn has some very promising mining claims.

J. J. Smythe is again on the road holding up in his own peculiar, gentlemanly manner all his friends in the interest of the Moffett West Drug Company, which he so ably represents.

Wm. Roberts attends to the prescription counter and superintends the rest of the store at Ward's pharmacy. He has many friends and is extremely popular with the ladies.

F. B. Angell, the well known Seventeenth street druggist had a close call recently. Fire destroyed the rear of the Sheridan Block in which his store is located. Smoke and water, however, did some damage.

C. S. Kline takes great pleasure in owning and using a wheel. On two or three occasions both himself and the wheel looked a little the worse for wear, yet he never gave up, simply increased his accident policy and went right on doing business at the old stand.

### Colorado Board.

The following passed as registered pharmacists in the examination before the Board of Pharmacy, held in the Haish Building, Denver, on December 7 and 8: Harry R. Birch, W. F. Bowen, J. H. Coleman, Louis N. Depyre, F. M. Farrar, E. K. Huddle, Harry S. Johnson, P. J. Kearns, M. G. Kimmel, E. G. Lewis, James F. Quinn, James Raizon, George F. Tiffany, George D. Woods.

### RANDOM NOTES.

T. E. Gibberd, traveler, for some years with Lyman, Sons & Co., Montreal, has taken an inside position with the house.

Luedke & Welborn, Leadville, Col., have ordered a new soda fountain from James W. Tufts, Boston.

Gethens Drug Company, Hamilton, Ill., have a new soda fountain made by James W. Tufts, Boston.

James W. Tufts, Boston, has under construction, at his factory, a fine onyx soda fountain for W. H. King & Co., Raleigh, N. C.

Underhill & Kittredge, Concord, N. H., are preparing for the coming season, and have ordered from James W. Tufts, Boston, a large onyx soda fountain.

At a banquet of the Vienna Pharmaceutical Society a popular student song was rendered in a slightly changed form, thus:

O serum, serum, o quae mutatio rerum.

A new wholesale drug firm has been started at Houston, Texas, under the firm name of R. C. Stuart & Wafes Drug Company, R. C. Stuart, Grafton Wafes and George W. Hyer are named as the incorporators, and the capital stock is placed at \$8100.

### The Explanation.

We learn that one of the heaviest manufacturing concerns of the East, one whose advertisement appears in every medical journal in the land, and which claims to be one of the greatest sufferers by substitution, has obtained the written promise of the editors and business managers of over 80 per cent. of the medical journals of America to publish and live up to the following:

"Owing to the fact that substitution of drugs is practiced to a great extent, we earnestly request our readers to assist us by reporting to us all cases in which they have been the victims of this criminal offense, giving the names and addresses of impostors; also all particulars to substantiate their statements, such as sworn affidavits, etc.

"We will expose in our columns the names of such fraudulent dealers on receipt of satisfactory evidence.

"All our readers will admit that a doctor who prescribes a certain remedy expects that his prescription shall be filled accordingly. A druggist has no right whatever to use his own judgment in the matter; otherwise he places the reputation of the physician, as well as the life of the patient, in jeopardy.

"Feeling that all doctors, honest druggists and manufacturers of legitimate proprietaries, will be benefited by our action in the matter, we solicit your assistance.

"The above notice must be a warning to druggists who believe that they are at liberty to substitute drugs."—*National Druggist*.

### A Loyal American.

Henry S. Wellcome, the well-known wholesaler, of Burroughs, Wellcome & Co. London, has evidently not forgotten that he is an American. He has purchased the portarit of Pocahontas, which hung in the Woman's Building, at the Chicago World's Exposition, and will, it is said, present it to the United States Senate.

### The Position of Iodine.\*

In the early part of the present week the general condition of the drug market seemed to indicate that the year would pass away without any further alterations of importance in the quotations of the staple drugs. Such expectations, however, ceased to be entertained on Wednesday, when the word "iodine" was on the tongue of every frequenter of 'Change. Few seemed to have any clear knowledge of what was going on in the article; but all appeared to be under the impression that an important change in the price was about to occur. That impression must have been deepened by a circular which, as the result of a common understanding, the English manufacturers of iodides addressed to their principal customers on Wednesday night. This document, headed "Iodine and Iodine Preparations," announces that there is much uncertainty in the market owing to the fact that some parcels are being offered by holders outside the convention, and that the firms responsible for the circular think it desirable to notify this fact to the trade. Recipients of the circular are further specially warned "against any low offers" that they may hear of, and the opinion is expressed that it would be unwise to touch such offers under the present circumstances.

The firms who have issued this circular are no doubt genuinely anxious to further their customers' interests; but, quite naturally, they would rather see iodine maintained at its present figure of 9 pence per ounce than enter upon an indefinite period of violent fluctuations, or of starvation prices. It may therefore be assumed that they wish to paint the position in as rosy a light as the rather stormy looking background of facts permits. The undercurrents of the market in an article still controlled, nominally at least, by such a corporation as the iodine syndicate are always difficult to probe, as there are very few sources of information, the syndicate agent's utterances being of the scantiest, especially toward press representatives. In answer to our inquiries the syndicate broker informed us that "certain disagreements" existed among the Chilean producers of iodine; that a settlement was shortly expected; but that, in the meantime, his principals could not give any quotations. This, though not a very succulent morsel of information for one who desired to get to the bottom of the matter, was something. In the first place, it showed that even the always outwardly optimistic broker of the iodine syndicate no longer goes about crying "Peace," where there is no peace, but admits the existence of a disintegrating element within his own army.

We are, however, in a position to supplement the syndicate broker's statements with the following others, which reach us from an excellent authority: Some days ago Messrs. Antony Gibbs & Sons, the consignees of the iodine syndicate, received a cablegram from South America authorizing them, if necessary, to cut the price of iodine down to a fraction of the recent quotation of 9 pence per ounce, in order to checkmate the ever-growing competition of "outside" producers. Although Messrs. Gibbs & Sons still hold their hands so far as actual price-cutting is concerned, they have for a week or more been delivering iodine to

\* *The Chemist and Druggist.*

their customers with blank invoices, accompanied by an intimation that the price for the goods is to be fixed within 90 days.

This state of things points to an extremely critical position of the drug, which, with its preparations, is one of the most important of pharmaceutical articles. The South American producers' convention was renewed on April 1, 1894, for three years, but the position of the syndicate toward the consumers at large is becoming more and more difficult. As we have repeatedly pointed out, the production of iodine is enormously in excess of the requirements, and the syndicate, while securing to its members an excellent profit on what it can sell, is only able to dispose of a small portion of what the producers can supply. Under these circumstances it is but natural that, in spite of the stringent clause in the convention binding its members to sell no iodine through any other sources, a constant supply of, shall we say "illicit," iodine keeps trickling into the London markets. The origin of these parcels, like the paternity of Mr. Yellowplush, is "wropt in mistry," but they get into consumers' hands all the same, and more of them every year. This leakage must be stopped if the syndicate is to hold out, and the circular of the iodide manufacturers, who are by interest allied to the iodine syndicate, shows the weapon wherewith it is sought to stop it.

The iodine syndicate on October 1 of this year (*vide C. & D.*, October 5, 1895, page 536) introduced a somewhat nigardly falling clause system in their dealings with the makers of iodides, who, in turn, handed down the concession to their clients, the consumers. Naturally, in buying from "outsiders," the purchaser receives no falling clause benefits. He pays the price bargained for, and there is an end of it. Now, say the iodine syndicate to the manufacturers, and these repeat it to their customers: "If you buy from any one but ourselves, say at 7 pence instead of at 9 pence per ounce, we may suddenly come down to 8 pence, and your 7 pence stuff will be a bad bargain for you. If, on the other hand, you deal with us, and the price breaks, we allow you the difference in kind."

We are afraid, however, that matters have gone too far to be mended, and that those interested in iodine preparations will soon have an opportunity of laying in stock at much lower rates than those now prevailing. A gentleman of much knowledge of the iodine industry said, in an interview published in our issue of December 23, 1894: "Iodine can easily be produced at 1½ pence per ounce." It would be interesting to watch the effect which a return to something like living margin rates would have upon the consumption of the article for technical purposes.

### Apolysin.

There are various combinations of citric acid with phenetidin, all of which have been prepared by the chemical factory of Dr. F. von Heyden's successors. One molecule of citric acid can be combined with three molecules of phenetidin, giving us citrophen; but it can also be combined with two and with one molecule, giving us entirely different substances. Nencki and Jaworski have proved that the most useful of these combinations is that which contains the largest number

of intact acid groups. This is apolysin, which contains two complete citric acid groups. Apolysin is also the most freely soluble of the series. It dissolves in 55 parts of cold water and in less than one part of warm water. There are metallic salts of apolysin, but it is the combinations with quinine, caffeine, etc., that deserve especial attention. Apolysin is stated to have the following advantages over phenacetin and the other remedies of that group: 1. It is very soluble, and hence more readily and completely absorbed; its action is therefore quicker and surer. 2. There are no by-effects, even when large doses are given; the well known cardiac depressant effects of phenetidin are not to be found in apolysin.

### A Snub to Early Risers.

Whatever may be your fad, it is certain sooner or later to receive the approval and support of the medical journals. From time to time they have discovered death in the milk jug, death in the teapot, death in wine, beer, tobacco, cycling, cricket, football, bathing and what not. The condemnation of the oyster was a heavy blow, and now we are asked to repudiate the principle of early rising. Speaking as one having authority and not as the scribes, the *British Medical Journal* makes bold to say that the early rising theory is a mistake, that the vital forces do not come fully into play until midday, and that the desire to get up with the lark, so far from being a sign of strength of character and vigor of body, denotes advancing age.

Such a doctrine is nothing short of revolutionary. It not only throws cold water upon the claims of the early risers, but by a parity of reasoning it extols that numerous class, the lazy lie-abed, who, we are now given to understand, are the salt of the earth. Frankly speaking, while inclined to rejoice at the snub administered to the early risers, I am unable to agree with the *British Medical Journal*. I wish I could, but all the scientific evidence seems to point to the early riser, or, let me say, the short sleeper, as the coming man.

Primitive man, like monkeys and birds, having no artificial light, must have gone to bed at nightfall, to sleep until sunrise; there was nothing else for him to do. Down to the last century civilization exhibited little change in this respect, all modes of artificial lighting being so poor that there was no inducement for anybody to turn night into day. The electric light, however, may conceivably enough make man independent of the light of day for the carrying on of business. In such an event the fittest type of man will surely be he who can keep awake longest, and get through the most work in 24 hours. I believe that the philosophy of "early to bed and early to rise" is a survival of the old conditions. "Work while yet it is day," says another authority, "for the night cometh when no man can work." That was a rash assertion. It could not have been enunciated at the end of the nineteenth century. A very great deal of the labor is done by night and the practice is sure to extend.

This being so, all the 24 hours, in fact, being now available for work, the man who wants a long sleep, rather than a short one, will assuredly be at a disadvantage in the struggle for life. If the Darwinian theory is true, therefore, he will tend to die out—i. e., to be replaced by a more active organization adapted to the new conditions.—*Pall Mall Budget*.

### HINTS TO BUYERS.

We acknowledge the receipt of a very cleverly designed and artistic Xmas card from the Harry Wiltshire Engraving, Printing and Embossing House, 130 Fulton street, New York.

E. B. Read & Son, 7 N. Charles street, Baltimore, issue a handsome sample card, showing specimens of druggists' labels, boxes, &c. Druggists will find it to their advantage to write for copies.

The December price-list of the Robinson-Pettet Company, wholesale druggists, Louisville, Ky., should prove a profitable pamphlet to Southern druggists. It contains a number of advantageous propositions on certain lines of goods for the holiday trade.

The Mattson Rubber Company of 241 Greenwich street, expect to issue their 1896 catalogue of druggists' specialties within a few days. The list will include a complete line of Rubber Goods used by the trade, with prices that will cause considerable comment.

C. F. Boehringer & Soehne, 7 Cedar street, New York, report an unusually active sale for their Ferratin tablets. So great has been the demand, in fact, that on several occasions delay on the part of bonded warehouse people in delivering orders has caused serious inconvenience. An average of 150 ounces a day sales has been maintained for some time, and since the holidays the trade has been even greater.

Johnson & Johnson have been compelled to add a four-story building, hitherto unoccupied, to their factory at New Brunswick, N. J., because of the boom that has been given to Vino-Kolafra and others of their preparations by generous, and, at the same time, judicious and novel advertising methods. The structure will be devoted entirely to the manufacture of the Kolafra preparations of the house.

"Pabst" announces that the next series of "Best Tonic" ads. will be embellished with figures taken from the era of highest Gothic development (between the years 1100 and 1400). The history of brewing begins with Egypt, but the art of brewing was developed by the Germans, which is given as a reason for the Germanic ads. that are to succeed the Egyptian. German type will not, however, be used. The announcement of what the ads. will be like is being made in popular periodicals, which seems a good way of drawing attention to the advertisements before their appearance.

### Do Not Hide Your Light.

No matter how good a pharmacist a man may be he will not be a financial success unless he lets the people know where he is, and of all the various methods of doing this none is more striking and effective than that furnished by Thos. Hughes, 25 Clinton place, New York, in his illuminated mortars, one of which is illustrated herewith. These mortars are striking and attractive in appearance, whether by night or by day, and probably give a relatively greater amount of advertising in proportion to the cost than almost any other medium. Druggists seeking to increase their business should write at once to Thos. Hughes, 25 Clinton place, New York, for this illustrated price-list showing various designs, and when writing mention the AMERICAN DRUGGIST.

**Local Anæsthesia by Infiltration.**

A very interesting paper on the value and uses of the new infiltration anæsthesia method has just been issued by John Wyeth & Brother, manufacturing chemists, Philadelphia. They have prepared tablets for extemporizing the necessary solutions to be used in this method, and considerable interest in the matter has been aroused among physicians, making it a subject of much import to pharmacists.

John Wyeth & Brother announce that they are prepared to furnish the following sizes of these soluble compressed tablets:

**TABLETS TO MAKE 100 MINIMS OF SOLUTION.****NO. 1.—STRONG.**

	Grain.
Cocaine hydrochlor.....	1-5
Morph. hydrochlor.....	1-40
Sodium chloride, C. P.....	1-5

One tablet dissolved in 100 minims of water yields the strong solution, representing:

1-500 part of cocaine hydrochlor.  
1-4,000 part of morph. hydrochlor.  
1-500 part of sodium chloride,

or each 1,000 minims contain

2 grains cocaine hydrochlor.  
¼ grain morph. hydrochlor.  
2 grains sodium chloride.

**NO. 2.—NORMAL.**

	Grain.
Cocaine hydrochlor.....	1-10
Morph. hydrochlor.....	1-40
Sodium chloride, C. P.....	1-5

One tablet dissolved in 100 minims of water yields the normal solution, representing:

1-1,000 part of cocaine hydrochlor.  
1-4,000 part of morph. hydrochlor.  
1-500 part of sodium chloride,

or, in other words, each 1,000 minims of this solution equal:

1 grain cocaine hydrochlor.  
¼ grain morph. hydrochlor.  
2 grains sodium chloride.

**NO. 3.—WEAK.**

	Grain.
Cocaine hydrochlor.....	1-100
Morph. hydrochlor.....	1-40
Sodium chloride.....	1-5

One tablet dissolved in 100 minims of water yields the weak solution, representing:

1-10,000 part of cocaine hydrochlor.  
1-4,000 part of morph. hydrochlor.  
1-500 part of sodium chloride,

or each 1,000 minims of solution contain:

1-10 grain cocaine hydrochlor.  
¼ grain morph. hydrochlor.  
2 grains sodium chloride.

Should more than 100 minims be required, use one tablet for every 100 minims of water used.

**TABLETS TO MAKE 500 MINIMS OF SOLUTION.****NO. 4.—STRONG.**

	Grain.
Cocaine hydrochlor.....	1
Morph. hydrochlor.....	¼
Sodium chloride, C. P.....	1

One tablet dissolved in 500 minims of water yields the strong solution.

**NO. 5.—NORMAL.**

	Grain.
Cocaine hydrochlor.....	¼
Morph. hydrochlor.....	¼
Sodium chloride, C. P.....	1

One tablet dissolved in 500 minims of water yields the normal solution.

**NO. 6.—WEAK.**

	Grain.
Cocaine hydrochlor.....	1-20
Morph. hydrochlor.....	¼
Sodium chloride, C. P.....	1

One tablet dissolved in 500 minims of water yields the weak solution.

Should more than 500 minims of solution be required, use one tablet to every 500 minims of water.

In cases where the solution is desired to be stronger or weaker than the normal solution, but being of the same relative proportions of cocaine, morphine and sodium chloride as in the normal solution, all that is necessary is to either increase or decrease the quantity of water to be used to each tablet of the normal recipes No. 2 and No. 5.

Special attention is called to the fact that in the normal (No. 2), strong (No. 1) and weak (No. 3) tablet, only the cocaine hydrochlorate varies, while the morphine hydrochloride and the sodium chloride are the same amounts in all three recipes. This also applies to Nos. 4, 5 and 6. The tablets are put up in tubes of 20 tablets each, in cases holding

sustained perfection of style. It has been said that it is a wilderness of lovely workmanship. It is from this place that the celebrated liquors come, among them the celebrated Robbia Amaro Bitters. We present herewith a small illustration of the monastery. American travelers in Italy never fail to see this noble specimen of architecture when in the vicinity.

**Therapy of Phenocoll.**

In a lengthy article, entitled "Contribution to the Study of the Anti-Malarial Action of Phenocoll," by Dr. Gino Righi, Padua, and published in the *Rassegna Medica*, the author concludes: The results attained with the new remedy are therefore most encouraging and lead to the following conclusions: 1. Phenocoll hydrochloride is an anti-malarial remedy equal or more than equal in efficacy to quinine, and can be prescribed with confidence. 2. It not only overcomes the febrile temperature of malarial patients, but it reduces the enlargements of the



MONASTERY OF CERTOSA DI PAVIA, ITALY.

ten tubes, and also in larger packages, such as 100's, 500's and 1,000's.

Druggists who are interested in the subject should write to John Wyeth & Brother, Philadelphia, for copies of recent pamphlets which this firm have issued.

**A Celebrated Old Monastery.**

Nearly 500 years ago, or to be more exact, on September 8, 1496, the foundation was laid for the Certosa di Pavia, the most splendid monastery in the world. Twenty-five Carthusian monks were appointed to take charge of this sanctuary, and for nearly four centuries it remained in charge of this order, and then passed through the hands of other orders, and was closed in 1810. The monks were re-established in 1843, and the building is now well cared for, being kept up by 25 monks, who derive some revenue from the Monks' Garden and Vineyards. This monastery, like other famous ones, including that at Chartreuse, is surrounded by extensive vineyards. All the great sculptor-architects worked in succession on this "miracle of beauty," and this may account for the

spleen and the evil consequences arising from it. 3. Its action is most pronounced when administered in small doses every hour for five hours previous to the expected return of the febrile access. 4. It is innocuous to the organism, and no undesirable symptoms or disturbances arise even from continued administration daily. 5. Its taste is only slightly bitter, and can be easily corrected, so that it is readily taken by children.

**Will Be Unique.**

Mrs. Gervaise Graham, the well-known manufacturer of Cucumber and Elder Flower Cream, and a large line of other Cosmetics, will do some unique and original advertising in 1896. She will publish a really handsome magazine, entitled *Beauty*, issued bimonthly; the first issue of 25,000 copies will be ready early in January. The magazine will contain articles on diet, bathing, exercise, the care of the complexion, hair and hands, and everything pertaining to the cultivation of health and physical beauty. Druggists who handle Mrs. Graham's preparations and her lady



agents will be furnished the *Beauty* magazine free for distribution to their lady patrons. Druggists wishing to secure copies should address Mrs. Gervaise Graham, 1424 Michigan avenue, Chicago, Ill.

#### Not Norwich, Conn.

In a recent reference to the business growth and development of the Norwich Pharmacal Company, Norwich, N. Y., we inadvertently placed the firm at Norwich, Conn. As some delay and confusion in answering inquiries has occurred to the Norwich Pharmacal Company in consequence, we desire to call attention prominently to the proper address of the firm, which, as stated above, is Norwich, N. Y.

#### The African Kola.

Lehn & Fink have just received a shipment of fresh and handsome Kola Nuts direct from the Congo, Southwest Africa. The nuts, which have an odd appearance to most people, are put up in queerly shaped baskets that recall stories of the fierce cannibals and trackless forests of Africa.

#### Sweets from Canajoharie.

Canajoharie, N. Y., although over 50 miles from Albany, the State capital, has been considered a capital place ever since it was associated with the names of Arkell, Willet Cook and others equally popular.

The town is now further advertised through the publicity secured in various magazines for "Pettit's Chocolate," which is manufactured by parties located in the place.

#### Upjohn's Pills Have the Call.

The Upjohn Pill & Granule Company of 60 Maiden lane, claim to have had in 1895 the most successful year of their existence. Sales for the year were fully 20 per cent. over any other twelvemonth, while the prospects for continued good trade are unusually bright.

#### An Innovation in Price-Lists.

C. G. Bacon & Co. of 218 Greenwich street are soon to issue a catalogue to the trade which will embody a distinctly new feature so far as publications of this class are concerned. Those who know the work involved in the production of a catalogue, and who have been accustomed to seeing "annual" catalogues, without prices, issued about once every four or five years, will be surprised to hear that Bacon & Co.'s catalogue is to be revised and published once a month. It will be a complete catalogue, too, of the drugs, chemicals, patent medicines and the leading drug sundries in use, and will contain a full and complete price-list, making altogether a book of about 800 pages. Just 10,000 copies of the catalogue will be distributed to the trade every month, immediately after publication, and it is pointed out that the prices quoted will be lived up to. C. G. Bacon & Co. say there will be no hiding behind the old pretext, "subject to market fluctuations," which has made most drug catalogues almost worthless. The work of getting up the book has been something phenomenal, taking up fully six months, but it is believed that it will fully repay the compilers for their labor.

#### Ferratin Prescriptions.

Pamphlets containing scientific reports on ferratin are being sent to all physicians in the United States. It is also advertised in over 60 of the leading medical journals of this country, and is now favorably mentioned in all new editions of text-books on materia medica and therapeutics. This insures prescriptions for the drug. Ferratin is supplied in powder form in 1-ounce bottles, and in  $\frac{1}{2}$  gm. (8-grain) tablets in 1-ounce tin boxes. Powder and tablets are furnished through all wholesale druggists at \$1.15 per ounce. Literature will be mailed free to druggists on application to C. F. Boehringer & Soehne, 7 Cedar street, New York.

#### For Steam Heated Apartments.

It has often been noted that a steam heated room is liable to give a feeling of depression on account of the dryness of the air. To counteract this difficulty, the Vapor Valve Mfg. Company, 26 Cortlandt street, New York, have a device and are placing upon the market a simple little contrivance called the Vapor Valve, which is attached directly to a steam radiator, and in which a small amount of escaping steam passes through asbestos which has been slightly moistened with a few drops of cresol, trikesol or "sanitas" for disinfecting, or some extract for perfuming the room. This simple device does its work perfectly and has already been introduced into many hospitals, offices and private houses. Any one interested in the Vapor Valve can procure additional information by writing to the manufacturers and mentioning the AMERICAN DRUGGIST.



With the Norsemen "Valhalla" stands for a feast, and the goods of the Valhalla Mfg. Company are of such a quality that they are entitled to the same meaning. Among the products of this company is Phosphated Beef, Iron and Wine, which has been indorsed by one of the leading Chicago jobbers as being equal to any on the market. Prices and particulars will be found in their advertisement, which appears on another page, or can be obtained by writing the Valhalla Mfg. Company, 228 Washington Boulevard, Chicago.

#### Essential Oils.

McKenzie Brothers & Hill, manufacturers and importers of essential oils, perfumery, fine drugs and chemicals, 52 Water street, New York, with branches at 26-28 India street, Boston, and 604 Arch street, Philadelphia, and factory and laboratories at Watsessing, N. J., issue a monthly wholesale price-list of their manufactures and importations. The January number notes the arrival of new crop oil of bergamot. Oil of camphor is advancing. Referring to oil of cinnamon, McKenzie Brothers & Hill make the point that they endeavor to handle only pure oil, testing over 70 per cent. cinnamic aldehyde. Adulterated oil is reported on the market and on the way from China.

The market for Ceylon oil of cinnamon is reported to be advancing. The same is noted with regard to oil of citronella, which is likely to advance in price owing to scarcity. McKenzie Brothers & Hill import this oil and guarantee quality. Oil of clove is distilled by this firm from selected clove buds in their own factory, in Watsessing, N. J. In Messina essences (which, by the way, is spelled "Mesina" in this price-list), McKenzie Brothers & Hill aim at handling only selected oil of highest grade, and as an evidence of this purpose they inclose with each package a certificate of purity from a well-known firm of Messina chemists and their seal is attached. The circular states that oil of rosemary is expected to advance. Oil of sassafras is manufactured by McKenzie Brothers & Hill on a very extensive scale, and they make the claim of being the pioneer manufacturers of the synthetic oil which is now so largely used. As to synthetic oil of wintergreen, which is now official in the United States Pharmacopoeia, under the title methyl salicylate, McKenzie Brothers & Hill point out that they are manufacturing it on a large scale in their factory in Watsessing, N. J., and they speak of its superior quality, sweetness and lasting properties as compared with the ordinary oils in the market.

#### A Showcase Free.

A sheet of writing paper water marked with the word "Shearer" in the center of sheet, or "Shearer" on the box or "Shearer" on the bands is a guarantee of the quality. Write at once, J. D. Shearer Company, Pittsfield, Mass., for druggists' designs and free samples, and learn how to obtain an elegant showcase in polished oak, free of charge.

#### Court Plaster as an Advertiser.

To those not intimately concerned in the wholesale marketing of plasters it is not generally known what a big figure is cut in the court plaster trade by the advertising people. Court plaster, to be given away gratis, is a staple article with the Accident Insurance Companies, who purchase great quantities every year—one concern in Chicago ordering 1,000,000 pieces of plaster at a time. Advertising novelty men also buy in big lots, while the makers of little conveniences for the toilet, such as silver and gold plated court plaster holders, invariably call for stock around holiday time.

#### Uses for Old Corks.

Corks are thrown away in great quantities, and very few people think that there is any value attached to that material after it has served its purpose once as stopper of a bottle. Nevertheless it has become one of the most valuable components of a city's refuse. Great quantities of used corks are now used again in the manufacture of insulating covers of steam pipes and boilers, of ice boxes and ice houses and other points to be protected from the influence of heat. Powdered cork is very useful for filling in horse collars, and the very latest application of this material is the filling in of pneumatic tires with cork shavings. Mats for bathrooms are made of cork exclusively, and it also goes into the composition of linoleum. Cheap life preservers are now filled exclusively with bottle stoppers, cut into little pieces.

**STARTING IN BUSINESS.**

In view of the great accumulation of evidence and the general progressiveness of the times, it strikes me as peculiar that so many young pharmacists starting in business should require so strong urging to go about it in a manner that will best conserve their own interests. It is easy to understand how a druggist having been in business for a number of years has adopted and become wedded to a system of conducting it that nearly every other wide awake merchant has long since discarded. It cannot be lack of ambition, education above the ordinary, attention to detail, or disposition to work. All these are demanded before he has become a competent member of his craft and the law so interposes and requires of him what it requires of no other merchant or dealer.

In the preparatory routine of this work he must undergo a mental training quite severe and stretching over a period of several years. Is it not possible that in this careful preparation and attention to detail he has lost somewhat his grasp upon the larger problems and possibilities connected with and demanded by a highly successful business of to-day? This seems to me the only fair interpretation to be given of that lethargy toward an improved manner of conducting business which the times are so imperatively demanding of those who propose to train in the front ranks.

If you cast your eye along the line of endeavor in every field of activity, whether of travel, manufacture, commerce, science, learning, or the arts, it is easy to note the rapid improvements of the past 20 or 30 years. It will be readily apparent to any one brought in constant

contact with the newer seekers for honors or wealth in the drug field, as I am, that among 75 per cent. of them there is a disposition to ignore the plain teachings

mode of locomotion the times afforded and must perforce answer their needs.

There is little excuse, however, to the present generation, or any number of



PRESCRIPTION DESK IN THE-FLEMISH RENAISSANCE-STYLE

of the times and try their fortunes over the old rut-worn course of their fathers of 30 years ago. The stage coach in which our ancestors traveled was the best

them who should now satisfy themselves with those methods when others, ten times more comfortable and rapid, will land them at their destination. You can

**WE REALIZE**

That Retail Pharmacists are too conservative and high-minded to be secured as REGULAR friends and customers by mere words and statements; hence our advertisements are solely the means we take of bringing ourselves to notice and soliciting TRIAL patronage.

Our ATTENTION and DEVOTION (not philanthropic, but business) to the interests of those who favor us with their custom is the means of our success, and is the reason that, in the past year,

***The Size of Our Business Just Doubled!***

We have customers in every State in the Union, except two or three, and their motto seems to be:

**“BUY ONCE FROM BACON, ALWAYS BUY FROM BACON.”**

We gladly mail our “Special Weekly Price-Lists” upon application, and we show below the advantages our customers had last week.

Opium (Natural), . . . . .	\$2.05	Cocaine (ounces), . . . . .	\$4.75
Castile Soap, White (Conti's), . . . . .	.09 <sup>3</sup> / <sub>4</sub>	Citric Acid, . . . . .	.88
Bromide Potash, . . . . .	.89	Sub. Nit. Bismuth, . . . . .	1.00
Flaxseed, . . . . .	.02 <sup>3</sup> / <sub>4</sub>	Powdered Opium, . . . . .	2.40
Alcohol, (Webb's), . . . . .	2.35	Camphor (ounce squares), . . . . .	.59

*P. G. Bacon & Co.*

Wholesale Druggists and Manufacturing Chemists,  
218 Greenwich St., New York.

**Kindly mention this Journal when writing to Advertisers.**

easily see here the absurdity between these two situations, because you understand and are familiar with both. The absurdity of going about the drug business in the manner of your fathers is just as apparent to me because I have lived and done business in both periods, and the hundreds of cases on both sides coming within the limit of my experience has given me great familiarity with all styles and methods.

This embraces a great many different things regarding the conduct of the business to which my observation is constantly drawn, but I am more particularly calling attention to the style and manner of fitting up the store to meet the growing demand for taste so much required at the present time. There has never been a time, I venture to say, when a nicely fitted store was not a better factor to the building up of a successful trade than a cheap one.

Also, there has never been a time within my experience when the contrast between the results has been so marked or the want of fine stores is so imperative as to day. I passed to day two stores on opposite sides of the same street, not a block apart, with no advantage to either, that I can see, in location. The one was an old-timer of 40 years ago, and the other made by me about three or four years ago. The old one does not do a business of \$5,000 a year, the other exceeding \$20,000. In the one case the store is old-fashioned and the methods as well; in fact, one seems to beget the other. The newer one is bright and up-to-date. It is my business to build the store and promote the ideas that make it successful. In fact, the store itself is a long step in the right direction, without which the other is very hard of accomplishment. The beginning of the new year is a proper time to consider these matters, and I can be of great service to you when you need me.

C. H. BANGS.

BOSTON, 406 Washington street.  
NEW YORK, 35 Murray street.  
PHILADELPHIA, 1416 Chestnut street.  
CLEVELAND, 1 Public Square.

## NOTES ON PRICES.

### The Chemical Market.

The Roessler & Hasslacher Chemical Company, 78 Pine street, New York, and 56 Fifth avenue, Chicago, issue their usual monthly prices current under date of January 4. Referring to the prospects for the new year and the present condition of business, the circular states that there is good reason to assume that the present year will be a prosperous one, for the only obstacle, the unsatisfactory condition of the country's finances, will after all, it is hoped, find remedy at the hands of Congress. A sure barometer of the present good condition of business is the continued upward movement in prices, affecting at this date even articles in our line that were subjected to the keenest competition. One of these articles is

**Acetanilid.**—Its price, although still below the proper level demanded by actual cost based on the higher price of its raw material, has advanced slightly and may improve still further.

**Aniline Oils and Salts.**—The reduced demand during the past month has brought a slight reaction in the price of aniline salt, and stocks, in hand of second holders, are therefore held at lower prices. The situation of the first hand and of the

raw material abroad remains unchanged and firm.

**Benzoic Acid** is higher in price.

**Peroxide of Sodium and Peroxygene.**—The field of usefulness for these splendid bleaching agents is continually broadening, and now embraces not alone wool, fibrous substances, horn, bone, etc., but also oils, fats and the like. R. & H. ask the trade to write for circulars, which give full directions as to its manipulation for the various uses.

**Quinine.**—Under date of December 18 Roessler & Hasslacher announced an advance to 28c. per ounce in the price of sulphate, the list of salts advancing proportionately.

**Yellow Prussiate of Potash.**—The market continues firm, although stocks in the hands of some dealers, due to the usual holiday dullness, have been offered at considerably reduced prices.

## Wholesale Druggists' Prices.

Changes in these prices during the past week have been unimportant though somewhat numerous. The fluctuations are noted in the following paragraphs, together with appropriate comment on the causes influencing the change.

**Acids.**—**Muriatic, C. P.**, can be purchased in pound lots down to the point of 18c., the range now being 16c. to 18c. **Nitric, C. P.**, has marked a decline of 2c. in sympathy with the lower prices for basic material: 18c. to 20c. is now the range as against 20c. to 25c. previously quoted. **Sulphuric** is also lower, 14c. to 16c. being now quoted. **Tartaric** has hardened a trifle in sympathy with the market for argols; quoted 35c. to 40c.

**Aloin** is quoted lower, the active principle sharing in the reduced prices for crude gum. Ounces can now be purchased for 10c. to 14c.

**Alum** is cheaper in powder and 6c. to 8c. will now buy. **Burnt, powdered**, has declined to 12c. to 15c.

**Apiol.**—Prices have been revised with 45c. to 49c. quoted as against 54c., the previous figure.

**Cadmium bromide and Iodide** have been marked down during the interval; 15c. to 20c. will buy the former in ounces, while the quotation for the latter stands 37c. to 41c.

**Caffeine** still continues irregular with several changes in price to report since our last. **Alkaloid** is 10c. lower, being quoted 35c.; **Bromide** has been marked down to 75c. to 85c., according to quantity; **Citrated** is 78c. in  $\frac{1}{4}$ -oz. vials, and **Valerianate** is quoted \$1.15.

**Cinchonidine sulphate** offers at a fraction less; 5 oz. cans quoted 8c.

**Codeine**, both alkaloid and sulphate, have tumbled appreciably; \$4.05 to \$4.25, to \$3.20 to \$3.40 are the respective quotations, marking a decline of from 40c. to 45c.

**Ferratin** is an accession to our prices current. The manufacturers' price to retailers is \$1.15, in ounces, in powder or tablet form.

**Gum opium** is higher, and the opinion is expressed in some quarters that a further advance is among the things to be expected. Whole gum is quoted \$2.10 to \$2.25, and powdered \$2.60 to \$2.75.

**Insect Powder** prices are steadier, and 25c. to 26c. is now quoted.

## Review of the Wholesale Market.

NEW YORK, January 9, 1896.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

Little of interest has transpired in any of the various departments of Drugs, Dyestuffs and Chemicals since our last report. It is yet too early to look for any marked increase of business, as dealers generally are giving their attention to overhauling their stock, and the traveling salesmen who contribute so much to swell the bulk of trade are at home. The proposed increase of tariff duties and the condition of national finances have both had their effects in bringing about a certain amount of uncertainty as regards the future course of the market. There have been no new developments in quinine, and the higher prices recently established by the manufacturers are well sustained. Further speculation in opium has led to a decided hardening in values, and higher prices prevail for all varieties. With regard to prices generally, the tendency of values is steady to firm, with few changes of a lower character to report.

### ADVANCED.

Acetanilid,  
Opium,  
Cascara sagrada,  
Morphine,  
Sassafras bark,  
Cascarrilla bark,  
Japan wax,  
Colocynth,  
Carbolic acid,  
Chrysophanic acid,  
Lithium salts,  
Gum chicle,  
Epsom salts,  
Black cohosh root,  
Cream tartar,  
Rochelle salt,  
Seidlitz mixture,  
Tartaric acid,  
Bayberry bark.

### DECLINED.

Salol,  
Balsam fir,  
Balsam Peru,  
Cod liver oil,  
Orris root, Verona,  
Caffeine,  
Gum shellac,  
Vanilla beans.

### DRUGS.

**Acetanilid** has recovered somewhat, higher prices for the crude product influencing a corresponding advance in refined; 26c. to 28c. and upward is generally quoted.

**Alcohol** shows no change from the prices recently established. A meeting of the combined producers was held recently, at which it was expected that an agreement would be reached for a general reduction of 2 cents on the gallon. Corn has declined materially in value of late, and it was thought that alcohol prices should reflect this in the same way that other corn products do, glucose for example, but no action was taken.

**Balsam Copaiba** continues in fair moderate request, with sales upon the basis of 82c. to 85c.

**Balsam Fir**, Canada, has remained quiet, and prices are less firmly maintained, a few dealers shading a cent or two, though \$2.15 to \$2.25 is generally asked, as to quantity. Oregon continues quoted at 60c. to 65c. in barrels and 70c. to 75c. in cases. We hear of no sales of consequence of either variety.

**Balsam Peru** is rather neglected at the moment and the movement is light, with \$2.80 to \$2.40 now quoted.

**Balsam Tolu** is in better supply and values are slightly easier, though nothing

offers in a jobbing way below 52½c., while 55c. represents the outside range.

*Barks* of all kinds are jobbing fairly, and one or two varieties have developed marked firmness. *Cascarilla* cannot now be purchased below the point of 7c., with up to 8c. asked. *Sassafras* has been in good request during the interval, and the market is firm at a slight advance; prime grade bark is held at 7c. to 9c., the latter figure being quoted for extra select. Ordinary quality offers at 6c. *Cascara Sagrada* has been taken in a very spirited manner for both domestic and foreign orders, and prices have advanced a notch or two. 4c. to 4½c. being now asked for old, and 3½c. for new.

*Bayberry* is reported scarce, with nothing offering below 15c. Sales for export have been made down to the point of 11c.

*Beeswax* continues in fair request, with numerous small sales at the range from 32c. to 33c., as to quantity, though we hear of sales in some instances at a fraction less.

*Cacao Butter* is generally held at 82½c. to 83c. for Dutch bulk, with numerous small sales reported at this range.

*Cassia Buds* appear well sustained at 18c. upward, but some lots could have been secured at ¼c. if, indeed, not at ½c., under that, spot delivery.

*Cocaine* is expected to advance soon to correspond with the higher prices now prevailing in the foreign markets.

*Cod Liver Oil* has been a trifle unsettled as to values, owing to more or less sharp competition between a few local holders. Offers to sell at \$49 to \$49.50 were made, and considerable business resulted, though quotations are fairly well maintained by the bulk of dealers at \$50 upwards for round lots.

*Colocynth*. Trieste, is higher and decidedly firm at the advance; the small available supply is closely concentrated, and nothing offers below 70c., with numerous sales at this figure, and the range 70c. to 75c.

*Caffeine* continues weak and unsettled, with \$6.50 quoted in most instances, though this quotation is freely shaded.

*Glycerin* remains in strong position. Crude commands the top prices recently quoted from the foreign market, and is not offered very liberally, while the distribution of refined seems unrestricted; quoted 17c. to 17½c., as to quantity.

*Menthol* has sold to some extent during the interval at a lower range, and is now generally quoted \$4.25 to \$4.50.

*Morphine* has advanced and is expected to go higher in view of the firmer position of opium and the expected advance in tariff duty. Under the proposed new tariff measure, as originally framed, opium remains on the free list. Morphine, which is at present dutiable at 50c. per ounce, is subject to the proposed increase of 15 per cent. Prices have advanced all along the line, and \$1.50 is now generally quoted, though we hear of a few sales within the range of \$1.45 to \$1.50. P. & W. is held at \$1.60.

*Opium* is selling fairly at the recent advance and prices are well maintained on all sides. Offers to sell are made with more freedom, however, and numerous sales of single case lots and smaller quantities are reported. Single case lots bring \$2, while broken packages are held at \$2.05 to \$2.10, with \$2.15 reached in remote instances. Prices for powdered Opium remain at \$2.55 to \$2.75 for ordinary and \$3 to \$3.10 for high grade.

*Quinine* continues inquired for to a moderate extent, but nothing of interest has developed. Foreign bulk does not offer below 26½c., and the bulk of sales are making at ¼c. more. P. & W. is held firmly at 30c.

*Saffron* American, has sold fairly within the interval, and continues in fair, steady request, and firm at 35c. Among other transactions we are reported a sale of 10 bales at this figure. Valencia is held at \$6.75 to \$7.50 and Alicante \$4.75 to \$5.35, according to quality.

*Tonka Beans* remain quiet and unchanged. *Angostura* offers at \$2.50 for prime, and *Surinam* and *Para* remain about the same as they have been for some time past.

*Vanilla Beans* are in better supply and easier, with \$6 to \$12 quoted for whole and \$3 to \$6 for cuts. Genuine Mexican brings \$5.

*Wax*, Japan, is held firmly at 7½c. to 7¼c., and a firmer feeling is developing. The available supply is small and concentrated in the hands of one or two dealers. *Carnauba* is weak and unsettled, with 24c. to 32c. quoted, as to number.

#### DYESTUFFS.

*Cutch* has developed no new feature either as regards price or demand. Bales and boxes are quoted 5c. to 5½c. and 6c. to 7½c. respectively.

*Divi Divi* continues quiet and the tone of the market is weak. We quote the range at \$42.50 to \$50.

*Gambier* continues to pass out into channels of consumption and a fair demand is experienced. Store goods are held at 4½c. to 4¼c., as to quality and quantity.

*Indigo* remains quiet and the market is without new features; prices are firm, with a fair seasonable demand.

*Nutgalls*, blue Aleppo, are selling fairly within the range of 12c. to 13c.; a few small parcels have changed hands recently at 12½c.

*Sumac* remains inactive, sales being confined to small jobbing parcels, for which \$40 to \$50 is required for Virginia and Sicily.

#### CHEMICALS.

*Acetate of Lime* continues dull and the tone of the market is weak, with sellers at 85c. for brown and \$1.25 for gray.

*Alum* has met with freer sale and prices are firmly maintained at \$1.65 to \$1.75 for lump and ground respectively.

*Arsenic*, White, is well maintained and the market is firm at 4½c. The spot supply is scarce and an advance is expected.

*Blue Vitriol* is steady at prices on the basis of 4c. to 4¼c. for prime, the inside figure for carload lots. Higher prices are anticipated.

*Brimstone*, Crude, is scarce on spot and still quoted at \$17 for unmixed seconds; lots to arrive at \$15.87½.

*Carbolic Acid*, crystals continue in demand and firm at the recent advance; nothing now is offered below 15c. to 15½c. and 21c. to 22c. for drums and bottles respectively.

*Chlorate Potash* is steady and in somewhat better demand. German has sold in the interval at 9c. and English at 9¼c.

*Epsom Salt* has hardened a trifle in the interval and it is difficult to purchase below 1c. The advance is the result of an agreement to maintain prices between

the manufacturers. The position of the salt is referred to as good and the present range of values is likely to be maintained for some time to come.

*Cream Tartar and Tartrates*.—Word is received as we go to press of an advance in *Cream Tartar* prices which affects *Tartaric Acid*, *Rochelle Salt* and *Seidlitz Mixture*. For *Cream Tartar* manufacturers now quote 26c. for crystals and the same for powdered, in five-cask lots. *Tartaric acid* is 1c. higher with crystals quoted 31c. to 31¼c., and powdered 31¼c. to 32c. *Rochelle salt* is advanced ¼c.; now quoted 20½c. to 21¼c. *Seidlitz mixture* is higher by ¼c., being quoted now at 17½c. to 18c., in boxes.

*Nitrate Soda* is easier and sales ex-ship have been at \$1.72 to \$1.75.

*Sugar of Lead* prices are reflecting the operation of competition between manufacturers, and the market is unsettled with white crystals quoted at 5½c. and brown 4¼c. to 5c., as to quantities.

#### ESSENTIAL OILS.

*Cassia* continues extremely scarce with high test oil quoted up to \$2.65 and low test \$2.10.

*Citronella* continues to reflect a rising market. The statistical position of the article is very strong. Our quotations still hold good, though an advance on these is asked in some quarters.

*Lemon and Orange* continue in demand and firm, without, however, any quotable change in value. New Orange to arrive can be purchased at \$1.75 to \$1.80.

*Peppermint* continues quiet but firm. A few sales of case oil are reported at \$2.15, for future delivery, though jobbers quote \$2.20.

#### GUMS.

*Aloes*, *Curacao*, continue firm and in demand with 8¼c. the inside price for round lots. Cape quoted at 6¼c. to 6½c., and *Socotrine* at 25c. to 32c.

*Asafetida* continues weak and values are easy with 18c. to 16c. quoted.

*Shellac* continues weak and unsettled with prices irregular. D. C., on the spot, sells for 84c., V. S. O. 29c. and *Diamond I.* the same; T. N. is weak at 25c.

#### ROOTS.

*Caulophyllum* has developed great scarcity and the quotations have been advanced 1c. with 3¼c. now asked.

*Gentian* is held and selling fairly in a jobbing way at 4¼c.

*Jalap* has sold fairly in the interval at about 17c.

*Sarsaparilla* is in better supply and sales are making at 5¼c. to 6c.

*Serpentaria*, Texas, offers at 21c. in some instances, though 24c. has been paid.

#### SEEDS.

*Caraway* continues inquired for to a moderate extent and sales are making upon a basis of 6¼c. to 6¼c.

*Celery* does not offer below 18c. and there is little doing in the article.

*Coriander* continues in moderate demand and dealers are quoting 4¼c. to 5c. for unbleached.

*Mustard* has been received in fair quantity since our last, but the bulk of the receipts has found its way into channels of consumption and prices on the whole are unaffected. We quote yellow at 2¼c. to 2½c., and brown at 2¼c. to 2½c.



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## PHARMACY FOR THE FORTNIGHT.

The Wonders of Photography, the Value of Pepsin and the Rise in Cream Tartar are commented upon editorially.

The report of the meeting of the Society of Chemical Industry includes a summary (p. 43) of an important contribution to the subject of the assay of caffeine by Eustace H. Gane and of papers on Bessemerizing Nickel Matte, and on American Phosphates for 1895.

The most interesting paper ready at the meeting of the American Chemical Society was by Dr. E. R. Squibb on the Manufacture of Chloroform from Acetone (page 45).

Pharmaceutical Progress (p. 45) includes a number of practical notes.

The review of the Position of the Pharmacist in the European Armies and Navies is continued (p. 46) dealing this time with the Belgian pharmacists.

Other articles of special interest are as follows: Easy Methods of Testing Drugs, p. 47; A New Method for Caffeine Estimation, p. 47; Detection of the Newer Medicaments, p. 48; Separation and Identification of Ptomaines, p. 49; Cochineal, p. 49; Colored Films for Show Bottles, p. 51; Remedies Brought out in the Past Year, p. 51; Camphor Leaf Oil, p. 52; The Rubber Industry, p. 54; The Spruce Gum Industry, p. 55, and the Australian Drug Clerk, p. 56.

## RECENT INVESTIGATION OF PEPSIN AND ITS ACTION.

At the Denver meeting of the American Pharmaceutical Association there was presented a paper on pepsin which evoked considerable discussion, and the majority of the speakers participating in it seemed inclined to doubt whether after all pepsin is of any real value. Our readers will no doubt recall an article on this subject by L. E. HARDING which was published in these columns and in which the author undertook to discredit the therapeutic efficacy of pepsin altogether.

### WHAT FOREIGN AUTHORS SAY.

This pessimistic view of the case was vigorously opposed by several of the members of the association who have paid especial attention to this subject, and it is interesting to note that the results of recent experiments by URÓBLEWSKI (*Zeit. fur Physiol. Chem.*) give strong support to the view that pepsin is of real value. These experiments are of special value since they also throw some light upon the relative value of pepsins derived from different sources.

Two parallel series of observations were made; in one pepsin obtained from the stomachs of children soon after death, and in the other pepsin obtained from the stomachs of pigs, was used. Fibrin stained with carmine was the material by which the digestive power of the preparations was tested in the usual way, the rate of the process being judged by the relative depth of the color the various liquids assumed after a given time. The acids were made equal to viginti normal alkali solution by means of litmus, except in the case of phosphoric acid, which differs from the other acids in its action on litmus, and so the solution was made by means of estimating the sp. g. of the solution. A second solution of phosphoric acid was also made having a litmus equivalence of  $\frac{1}{10}$  Na<sub>2</sub>CO<sub>3</sub>, and it was found by taking the specific gravity that this solution had the equivalence of a deci-normal alkali solution.

### FIG VS. HUMAN PEPSIN.

Two kinds of pepsin were used: pig's pepsin prepared by WITTE's method, i.e., glycerin extraction and subsequent filtration; and human pepsin obtained in the same way from the stomachs of infants that had perished during birth. The pig's extract was more powerful than that of infants, so that the former required dilution to make it of exactly the same digestive power as the extracts from the stomachs of children. Ten ccm. of the different acid solutions were placed in two sets of 12 similar test tubes. One tube was set apart with distilled water to serve as a control. One ccm. of carmine fibrin was placed in each tube, and then 1 ccm. of child's pepsin extract in the first series of tubes, and the same amount of diluted pig's pepsin extract in the second series. The tubes were shaken from time to time, and were kept at a temperature of 15 degrees C.

### EFFECT OF DIFFERENT ACIDS.

The tabulated results of these experiments show that digestion is most rapid with oxalic acid solution ( $= \frac{1}{10}$  normal alkali solution), and after that successively with HCl, HNO<sub>3</sub>, and H<sub>3</sub>PO<sub>4</sub>, tartaric, lactic, citric, malic, paralactic, sulphuric and acetic acids. With pig's pepsin and oxalic digestion was complete in 80 minutes, and with child's pepsin in 40 minutes; in the rest of the series a gradual decrease of digesting power was observed—with the exception mentioned below—so that the acetic acid tube showed only a trace of red color in the liquid after 20 hours' digestion with child's pepsin, and none, after the same period with pig's pepsin. With the stronger phosphoric acid ( $= \frac{1}{10}$  normal alkali) the process was complete in both cases after 40 minutes. The control tube showed no color in the water after 20 hours. Some differences were observed in the behavior of the two kinds of pepsin; thus, with pig's pepsin, phosphoric acid ( $= \frac{1}{10}$  normal alkali) came fifth on the list, while with child's pepsin it came sixth, and lactic acid fifth.

A further series of observations were made to test the effect of various substances in modifying the rate of digestion. The results showed that whether as hydrochlorates or as the free base, caffeine hastened digestion, as did also, but less markedly, theobromine and codeine. On the other hand, veratrine delayed the process to a marked degree, and to a less extent the same effect was noticed with morphine, conine, or atropine. The hydrochlorides of narceine, strychnine, quinine, and conine also delayed digestion.

This testimony to the value of pepsin is further strengthened by that of Dr. PAUL, editor of the *Pharmaceutical Journal*, who in directing attention to the experiments above reported says: "The value of reliable preparations of pepsin in certain functional disorders of the stomach is established."

### THE WONDERS OF PHOTOGRAPHY.

**E**LECTRICITY and photography are the two fields in which everything is to be expected and nothing astonishes. Where the two are combined we have indeed to expect marvels. The kinetoscope, though in a sense little more than a toy, is an evidence of the wonders to be expected from electricity and photography working together, and a still more remarkable result than that shown in the kinetoscope has been accomplished by Professor RONTGEN of the University of Wurzburg, Germany.

**PHOTOGRAPHY WITHOUT A LENS.** So far the reports rest upon newspaper authority, but the original reports have been so generally confirmed as to lead to their acceptance as being correct. Moreover, the experiments have been repeated with brilliant success at the London Camera Club. The negatives are produced by placing the object to be photographed between a CROOKE tube and a wooden plate holder containing an ordinary sensitive plate, exciting the tube by means of a secondary induced current of electricity for from 4 to 20 minutes and then developing the negative in the usual manner. The slide is not removed from the plate holder.

**LIVING SKELETONS PHOTOGRAPHED.** A negative thus made from the living hand shows only the bones of the hand, while the negative of a leather purse containing coins showed only the coins and the metallic clasp. This remarkable result is accounted for on the theory that the strange medium which produces images of hidden objects on a photograph plate is not light at all. It is equally incorrect to describe it as electricity. It is some force or influence produced by CROOKE's tube when excited

in a peculiar manner, but it is not the visible light or glow which comes from the tube. That visible light has the same qualities as an ordinary light. The invisible new medium has not the same qualities. For instance, it will not penetrate clear glass. It will penetrate ground glass, though more feebly than wood and other organic matter. Aluminum is far more transparent than glass. Even copper is less opaque than glass.

Mr. SWINTON, the London electrical engineer, exhibited a large collection of these strange photographs at the Camera Club. He employed a half horse-power electric current, and passing it through an induction coil, loaded ten Leyden jars. The discharge from them was passed through a second induction coil by a secondary system by which CROOKE's tube was excited. He said that he had only succeeded in this way, and had failed with CROOKE's tubes excited by an ordinary induction coil.

### PHOTOGRAPHING RETINAL IMPRESSIONS.

An almost equally remarkable discovery is reported by W. INGLIS ROGERS in the *Amateur Photographer* of November 22. Mr. ROGERS asserts that he has been able to photograph the retinal image of an object. His first experiment was done alone; the second was in the presence of three other men, one being a physician. A small object, in one case a shilling, in the other a postage stamp, was placed in a good light before the writer, who gazed fixedly at it for one minute; the light was then shut off, and the test object replaced by a rapid photographic plate, at which the author looked steadily for a period (in the second experiment) of 20 minutes, concentrating his thoughts meanwhile wholly upon the image of the object he had been previously fixing. During the substitution of the plate for the last object, the observer's eyes were closed. The plate was then developed in the ordinary way, and reproductions of the psychograms are given in the journal. In the first case, in which a shilling was the test object, the print shows an ill defined circle on the plate, and in the second, when a postage stamp was employed (and a larger plate used than before), "two impressions were obtained, one from each eye, and at respectively the same distance from each other as the eyes." These impressions (in the reproduction), according to the *British Medical Journal*, bear a distinct resemblance to a postage stamp. These latter experiments, or similar experiments, can be carried out by any one with a little assistance.

### A Good Journal.

You are publishing a good journal. Keep it up. J. F. PATTON.  
YORK, PA., October 10, 1895.

### THE ADVANCE IN CREAM TARTAR.

**T**HE advance in cream tartar which was announced in our last issue brings the price again to where it stood five years ago. There had been a steady decline in prices for 1890 down to within a few months since, which was attributable to the large stock of argols or crude cream tartar which had been accumulated through the very large wine crops of both France and Italy. The causes leading up to the present change in prices may be thus summarized:

Last year the wine crop in France was short, owing to the early appearance of phyloxera, which destroyed about 45 per cent. of the crop. Italy, which furnished half of the world's supply of argols (crude tartar), also had large crops formerly, but vine diseases last year diminished its production of wine. To-day the price of crude tartar is nearly 100 per cent. dearer than in 1893, when the price of tartar refined was 17½ cents. To-day the price is 26 cents per pound. The argol forms in scales on the sides and bottom of the tanks where the wine after pressing is placed to settle, and from these scales the cream of tartar of commerce is manufactured.

Of late years the consumption of cream of tartar has undergone a marked increase on account of the low selling price made possible by modern and less costly methods of production, but mainly on account of the higher standard of quality. To-day it is said that the commercial article is 99½ per cent. pure. This is one reason why cream of tartar has preference over other materials in the manufacture of baking powder, and now the wholesomeness of the article goes without question. The production of cream of tartar is almost entirely used in the preparation of baking powders. Ten years ago less than 5,000,000 pounds were thus consumed annually. To-day upward of 10,000,000 pounds are so consumed. The manufacturers of dyes use much smaller quantities than in former years, lactic acid, which is produced artificially, having taken the place of cream of tartar to a considerable extent in all dyeing processes.

One of the reasons for the increased consumption of cream of tartar is that the low prices in the last few years have brought into existence many small manufacturers of baking powder, either jobbing grocers or those who manufactured the goods and packed them under the label of the jobber. Another cause is found in the increased production of baking powder in California. There are now one or two large concerns there, as well as a number of smaller ones, which between them furnish the bulk of the supply for the Pacific Coast.

### A Physician's Opinion.

Having received the *AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD* for 1895, and read as many of the articles as time and opportunity permitted, I esteem it the best edited and the best and truest exponent of the principles that should govern pharmacists and physicians in their relations to each other and to the public that I have ever had the pleasure of reading.

T. M. CARROLL, M.D.  
SPRINGFIELD, OHIO, December 25, 1895.

## Society Proceedings.

### SOCIETY OF CHEMICAL INDUSTRY.

#### AMERICAN CHEMICAL SOCIETY.

The regular monthly meeting of the New York Section of the Society of Chemical Industry was held in the botanical museum of the New York College of Pharmacy, on Monday evening, January 20. After the reading and approving of the minutes of the previous meeting, Chairman Mason made a few remarks concerning the affairs of the Section, in the course of which he pointed out the careful and prompt attention paid by the editors of the journal of the society to papers presented in the New York Section. He then entered a plea for the contribution of papers from the members of the Section. The first paper read bore the title

#### The Determination of Caffeine in Tea.

By E. H. GANE, PH.C.,  
New York.

The author said that the exact determination of caffeine was a matter of great difficulty and that most of the published processes were valueless for the purpose intended. Paul and Cownley's process, consisting of treatment with magnesium oxide and subsequent exhaustion with alcohol, has been generally followed, but was open to suspicion.

Mr. Gane drew special attention to Allen's paper on caffeine, read before the British Pharmaceutical Conference in 1892, and said that a large part of his own work was confirmatory of Allen's work, and his conclusions might be summarized as follows:

1. Aqueous solution of caffeine may be evaporated to dryness at 100 degrees C. without loss.

2. Boiling with lime causes decomposition of caffeine, the loss varying from 20 to 50 per cent. Magnesia does not affect this decomposition.

3. All processes based on boiling tea with lime are valueless owing to the ease with which caffeine decomposes.

As the result of his own work the author said that Paul's process was open to error and should be abandoned. Zoller's process, in which tea was treated with sulphuric acid and the charred mass subsequently extracted with alcohol, was accurate, but was too tedious and expensive, owing to the retention of caffeine by the charred mass and the necessities of using large quantities of alcohol to remove the whole of the alkaloid.

Herlant's process, based on the solubility of caffeine in the solution of sodium benzoate, was also inaccurate, as a cold solution will not extract the whole of the caffeine in a less period than two weeks.

The most satisfactory process was that advanced by Allen, which consists in boiling the tea with water for six hours, filtering, precipitating the coloring matter with lead acetate, evaporating the filtrate to a small volume, removing the excess of lead by  $\text{Na}_2\text{HPO}_4$ , and shaking out the solution with chloroform. The treatment with chloroform must be repeated four or five times.

The author said that Paul's statement that water would not extract all the caffeine was inaccurate, as the results below would show. They are tabulated and show the result of determinations, using both Paul's and Allen's processes. In several cases the magnesia and alcohol process gave very inaccurate results.

#### PERCENTAGE OF CAFFEINE FOUND.

Sample.	By Paul's process.	By Allen's process, but boiling for eight hours instead of six.
1. Black dust.....	2.51	2.58
2. Black Japan, whole..	2.86	2.89
3. Black Amoy, whole..	3.06	3.14
4. Green dust.....	1.67	2.56
5. Black Congou, whole	3.18	3.36
6. Green Hyson, whole..	1.41	2.10
7. Green sweeping.....	1.52	1.70
8. Black Assam, whole..	3.50	3.36
9. Green dust.....	1.24	2.22
10. Assam, whole leaf..	3.93	4.01
11. Ceylon, whole leaf..	3.98	4.12
12. Black dust Japan....	1.98	1.96

The caffeine residues were in all cases purified. The residues from the alcohol process are more difficult to obtain clean than those from the water process, owing to the solution of chlorophyll by the alcohol used. Allen's process was all that could be desired.

After the reading of the paper the question was raised as to whether the author ever tried boiling with acidulated water, then adding magnesia and finally extracting with alcohol.

Mr. Gane replied that he had tried extractive with acidulated water and had not found it to give any better results than the use of water alone. He had not, however, tried the method suggested in detail, that is, so far as the subsequent treatment with magnesia and alcohol was concerned.

Professor Coblentz commended the paper, saying it was a very valuable one, treating as it did a difficult and delicate operation in chemistry. He had thought that Prollus's fluid would yield good results here. Dr. Coblentz had not himself tried this method, and wished to know whether Mr. Gane had made any trial of this. Mr. Gane replied that he had not.

Dr. Schweitzer wished to know whether any other solvents had been experimented with than those named, acetone, for instance. Mr. Gane said that he had confined his investigations to the menstrua named in the paper. Dr. Stilwell stated that in the case of difficultly soluble compounds, such as that in which caffeine apparently existed, in tea, the use of a Soxhlet apparatus in which heated vapors could be brought into contact with the ground drug.

Mr. Gane stated that one of the serious objections to the use of alcohol lay in the extraction by the alcohol of green coloring matter, which contaminated the caffeine and was very difficult to get rid of.

Mr. Gane's paper was followed by one bearing the title

#### Bessemerizing Nickel Matte.

By H. W. EDWARDS,  
Santa Monica, Cal.

The author's paper was based upon experience in Canadian mines. He laid much stress upon the part played in the Bessemer process by the silicates contained in the lining of the converter. Contact between the silicates and the iron present was difficult or impossible to bring about in any other way. He gave a number of details of much practical interest to the metallurgist.

In reply to a query, Mr. Edwards stated that there was no reliable and at the same time accurate method of making very rapid chemical determinations of nickel. The best he could do was about 28 per week.

It was followed by a paper on

#### American Phosphates, 1895.

By SAMUEL PEACOCK,  
Philadelphia.

In the absence of the author, Chairman Mason read the paper, which dealt with the commercial aspects of the industry.

South Carolina produces a larger proportion of the output in the United States, Florida standing next and Tennessee coming last. The total production for 1895 was reported as less than for 1894, but owing to the disorganized condition of the industry it was impossible to obtain reliable statistics. Tennessee was the only field which made any marked gain in 1895, the output of that State for the past year being about 50,000 tons as against 15,000 tons in 1894. While the phosphate miners of Tennessee were much hampered in their operations by lack of capital, Mr. Peacock was of the opinion that this difficulty would probably be soon overcome, as the phosphate beds were most advantageously situated, being near the farming district in which the product is utilized.

The entire phosphate trade suffered from lack of organization and from the system of reckless competition incident to this lack.

In the discussion of the paper which followed, Mr. Edwards stated that one of the factors in the decreased European demand lay, no doubt, in the increased use of basic slags containing phosphorus, which are now applied by being simply ground fine.

Mr. Gane called attention to a statement in Dr. Wylie's new work on agricultural chemistry, to the effect that the presence of basic phosphoric slags in fertilizers should be looked upon as an adulteration, since the results show that this form of phosphate is not set for plant assimilation.

Mr. Edwards reported formally that he had experimented with putting up fruits in hermetically sealed cans. He had tried using nitrogen and carbon dioxide.

Dr. Schweitzer directed attention to a report of the use of alcohol vapor, published in the U. S. consular reports.

Dr. Horn stated he had found that small quantities of antiseptics were practically used. He found that in the case of olives they can be preserved by repeatedly heating to 175 degrees. Mr. Gane stated that he had made one or two experiments in the direction of preserving fresh fruits and that most successful results had been obtained by using very small quantities of chloroform in an air tight container. He had found that he could preserve fruits such as strawberries

and others of like nature in good condition for some months by putting about  $\frac{1}{4}$  dram chloroform into a  $\frac{1}{2}$ -gallon jar filled with the fruit and immediately closing up the jar, making it air tight. The chloroform immediately evaporated when the jar was opened, leaving not a trace of its characteristic odor.

Mr. MacMillan also said that he had found the use of sterilized air the most practical and effective means of preserving the fruit without affecting their flavor. His experience had not however, been very extensive. He had put the fruit to be preserved in a bell jar and replaced the air contained in the jar by air which was passed through a tube heated to about 800 degrees filtered through absorbent cotton.

After some further discussion of this subject the meeting was adjourned.

### AMERICAN CHEMICAL SOCIETY.

The New York section of the American Chemical Society held their monthly meeting in the chemical lecture hall of the College of the City of New York, on Friday evening, January 10. Prior to the meeting some 80 of the members dined together at the Hotel Bartholdi.

In opening the meeting Prof. Peter T. Austen, chairman of the section, informed the members that through the courtesy of the trustees of the college, and of Dr. Webb and Professor Doremus in especial, the section had been granted the most unusual privilege of holding its meetings in this lecture hall, which since the destruction of the old building of the University of the City of New York was the oldest room in the city devoted to chemical study and experimentation.

The thanks of the section were formally tendered by vote to the college authorities, and especially to the gentlemen named, for the courtesy.

#### NEW APPARATUS SHOWN.

Professor Austen then introduced Mr. Eimer, who explained the construction of several of the large number of new apparatus which Eimer & Amend had loaned for exhibition. These included convenient forms of small centrifuges, both for hand and for electric power, ore pulverizers and samples of a small and convenient water still, a Doremus ureometer, improved reagent bottles, specimens of flasks made from a new glass of such high resistance that they can be heated by the direct flame; an apparatus for the direct determination of alcohol in vinegars, etc., which is much used in Germany, and though valuable is little known in the United States, and an old but very efficient apparatus for the determination of moisture and carbon dioxide in the atmosphere. He also showed a scale sensitive to the two hundredth of a milligram which was useful in assays of the low grade silver ores, where it was important to determine whether or not they came within the \$5 per ton limit; and a very compact balance in a portable case intended for the use of experts in court room work.

#### The Present Status of Iron and Steel Analysis.

By G. E. HENNING, M.E.

The first paper of the evening dealt with the present status of iron and steel analysis and the author, G. C. Henning, M.E., gave a very forcible presentation of a plea for greater accuracy in the methods of metallurgical assay. He cited

statements from several leading authorities based upon recent work to show the inaccuracy of existing methods even where great accuracy is aimed at. In one instance given specimens of the same sample were examined by a number of commercial chemists. Each chemist was informed that the work was being done for the purpose of comparison, and that therefore great accuracy was desired; but even under these circumstances the results ranged from 10 per cent. above to 10 per cent. below the mean average of the results as a whole. The author criticised somewhat severely the chemists who, in the face of such deplorable showing, continued to depend solely on the results of chemical analysis, neglecting altogether to resort to physical investigation. He dwelt particularly on the value of the microscope in metallurgical assay, both on the ground of certainty of result and celerity of determination. He also devoted some time to a consideration of the peculiar character of the compounds of iron with carbon, some of which seem to ignore the ordinary rules of valence and to contain as much as 24 or even 80 atoms of iron united with one atom of hydrogen. These compounds presented distinctly recognizable characteristics under the microscope when enlarged 800 times or more, though under low powers these characteristic differences were not discernible.

In the course of the discussion of the paper it was brought out that the carbon and iron compounds referred to were looked upon rather as "solutions" than as definite chemical compounds, although the "solutions" always contain definite proportions of the two constituents, any excess of iron or of carbon beyond that required to form some one of the "solutions" being present in the free state.

#### The Determination of Manganese.

By G. C. STONE.

G. C. Stone read a paper on the "Volhard Method of Determining Manganese," referring to a previous paper read before the society and published in the journal, in which he described the conditions under which he found it desirable to conduct that method. He found that, provided all the iron was oxidized, it made no difference whether nitric, sulphuric or hydrochloric acid were used. The only difficulty occurred when the amount of manganese was extremely small, in which case it was difficult to get the precipitate to cohere and give a clear solution in which to perceive the end reaction.

#### FORMATION OF PERMANGANATES BY HEAT.

Mr. Stone also called attention to an occurrence of what seemed to possibly be a case of the formation of permanganate by heat. Opposite the blow hole of a furnace in which some manganic iron ore was being smelted there stood an iron screen, and while casting some of the ore sputtered against this screen. Some water thrown upon the screen turned to the characteristic purple color of a solution of permanganate. Mr. Stone was unable to verify his impressions as he was unable to again obtain this effect.

#### The Manufacture of Chloroform from Acetone.

By DR. E. R. SQUIBB.

Dr. E. R. Squibb then read a paper on the manufacture of chloroform from acetone, dealing more especially with the question of the right to manufacture

acetone under the process described not long since by him\* without interfering with any existing patent rights. His paper opened with a sketch of the history of acetone from its first mention down to the present. Pelouze was quoted as mentioning acetic acid as the best source of acetone, its vapor being passed through a red hot tube filled with pumice stone, to increase the surface action. It was shown that this substance was well known prior to 1848, and had been made in large quantities prior to 1882. Dr. Squibb prepares acetone by destructive distillation of the "watery vapor of acetic acid in a rotary still, in the presence of barium carbonate or pumice stone or bone charcoal, barium carbonate being preferred."

In regard to acetone-chloroform he quotes Liebig as giving the preference to acetone as the most suitable compound for the preparation of chloroform.

The work of Böttger and Siemerling was described and the results obtained by them were reviewed. One-third of the acetone used was the largest yield of chloroform obtained by Böttger, its specific gravity was 1.81 and it always contained acetone.

The misleading results of Siemerling's work were accepted so implicitly and quoted so definitely in standard works of reference that the further progress of the manufacture of chloroform from acetone was for many years obstructed, and patents have been issued in which the claims were based on supposed improvements on these erroneous results.

#### Compressed Gases at High Pressures.

By J. S. STILLWELL.

The author stated that the use of compressed gases has enormously increased in recent years, and some investigations have been made of occasional explosions which had occurred of the containing cylinders. Some investigators had claimed that the passage through a minute orifice of oxygen under high pressure, 2,500 pounds to the square inch, would create sufficient friction and consequent heating to cause explosive union with any oils or fats which might be present, and which would be volatilized by the mentioned source of heat. The author had, in the course of practical experience, tested this point over 100,000 times, and was satisfied that the heat never rose to the danger point under normal conditions of working, and that a heat approaching 400 degrees F. was necessary before danger of explosion need be feared. This high temperature of the compressed gas was never reached, except through some careless or accidental want of proper cooling of the compressor cylinder.

This paper closed the proceedings.

Testing Sodium Bromide by Taste.—Peeters recommends (*Annal. de Pharm.*) a very simple, though not a strictly scientific, method of testing sodium bromide by taste. He has observed that if the salt contains more than the 5 per cent. of water which is allowed by the Pharmacopoeia, a grain of it when placed upon the tongue will produce merely a salty taste; if the sample be of pharmacopoeial strength there will be produced a very characteristic burning sensation, whereas potassium and ammonium bromide on the contrary produce a cold sensation.

\* See the AMERICAN DRUGGIST for March 11, 1895, page 130.

## PHARMACISTS IN THE ARMIES AND NAVIES OF THE LEADING EUROPEAN STATES.\*

### IX.

#### Belgium.

In Belgium not only the active members of the army but also their families and servants, and also the workmen on the government railroads, are provided with medicines from the military pharmacies.

These military pharmacies are located in the 17 garrison hospitals of the country. The medicines and pharmaceutical instruments and apparatus for them are obtained from the Central Pharmacy of the army in Antwerp.

The pharmaceutical service is performed almost entirely by professional military pharmacists, assisted by pharmaceutical assistants and by hospital stewards. The military pharmacists in the hospitals are subordinated to the chief surgeon, who directs the sanitary service both of the hospital and of the garrison.

The above mentioned Central Pharmacy is also directed by a military pharmacist, while another military pharmacist is detailed as the General Inspector of Military Sanitary Matters.

#### RANK OF THE MILITARY PHARMACIST.

The military pharmacists are classed as commissioned officers, with the following ranks:

One director of the Central Pharmacy, chief pharmacist, with the rank of lieutenant-colonel.

Two principal pharmacists, with the rank of major.

Nine pharmacists of the first class, with the rank of captain of the first class.

Seven pharmacists of the second class, with the rank of captain of the second class.

Nine pharmacists of the third class, with the rank of first-lieutenant.

Nine pharmacists of the fourth class, with the rank of second-lieutenant, making 87 in all.

#### PHARMACEUTICAL ASSISTANTS.

The pharmaceutical assistants who were mentioned above, and from whom the military pharmacists are taken, comprise the following persons:

Four assistant pharmacists of the first class.

Four assistant pharmacists of the second class.

Seventeen auxiliary pharmacists (scholars).

Forty *élèves pharmaciens aspirants* (pharmaceutical scholars preparing themselves as pharmacists in the army).

#### DUTIES OF THE MILITARY PHARMACIST.

In addition to services properly in the pharmaceutical line, the military pharmacists must also make all hygienic

chemical examinations necessary for the good of the army.

#### EDUCATIONAL REQUIREMENTS.

The course of education of Belgian pharmacists has been newly regulated by the law of 1890. By it graduation from a college called "College Royal" or "Athenée Royale," is required for admittance to the profession. Preparation for the profession begins with study at a university, which for two years is confined to natural science in general, to chemistry, physics, botany, zoology, mineralogy and geology, and to philosophy. Then the first examination must be taken; everybody who passes this examination becomes a "candidat en

sciences naturelles." To obtain the diploma of a pharmacist he must study two years longer, devoting most of his time to the study of the sciences relating directly to pharmacy.

During these two years the candidates also receive their practical training in a pharmacy. If they then pass a second examination, they receive the diploma of a pharmacist.

The course of preparation of the military pharmacists is the same, except that they receive their practical training in the pharmacy of a military hospital. They become "*élèves pharmaciens aspirants*" in one of the latter, after they have received the diploma of a pharmacist.



Salipyrin is completely soluble in a little water and ether, but separates into two layers, the lower aqueous layer giving the reaction for antipyrine and the upper ethereal layer giving the reaction for salicylic acid.

Trefusia is, according to Riedel's *Mentor*, a natural iron albuminate. *Thallin Periodide* is an iodine addition product of thallin sulphate. It occurs (*Pharm. Centralhalle*) as a black crystalline body which is soluble in alcohol. Mortimer Granville states that he has used this substance in combination with musk or with pilocarpine for years in the treatment of carcinoma with the best results.

**Preservation of Chloroform by Sulphur.**—Allain has observed (*Jour. de Pharm.*) that chemically pure chloroform which is saturated with sulphur is not decomposed even by long exposure to the atmosphere. He uses sulphur which has been purified by allowing it to stand in the cold with an equal quantity of ammonia for 24 hours and then washing the sulphur with cold water and drying at 40 degrees C.

**Perchloride of Mercury in Whooping Cough.**—The *Giornale Medico del Esercito* advises painting the throat of children affected with whooping cough with a 1 per 1000 solution of perchloride of mercury, going well to the back of the tongue and over the uvula and tonsils every morning. No toxic effect has been observed, and most cases can be cured in from 8 to 14 days.

**Ammonia in Corks.**—Van Ledden-Hulschebosch and L. Willen have made an examination of corks for the presence of ammonia and conclude (*Schweiz. Woch. f. Chem. u. Pharm.*) that while there are occasionally present small traces of ammonia, Prof. Liechti was in error in attributing the change of color in Ness-

ler's reagent to this substance, since according to their investigation the color produced is due to the presence of tannin.

**Taraxacin.**—In the root of *Taraxacum officinale* there exists (*Pharm. Central*): 1, A coloring matter; 2, an amorphous bitter principle; 3, a crystalline bitter substance, taraxacin. This latter is prepared from the fluid extract of the root by precipitating with lead acetate, removing excess of sulphuretted hydrogen and evaporating the filtrate, which is very bitter, with sand. The dry residue is extracted with chloroform, and in recovering this solvent the taraxacin is left in crystals to the extent of about 0.05 per cent. of the crude drug.

**Urotropin Iodoform.**—According to Konteschweiler this substance may be prepared by mixing a solution of the component substances in the proportion of 25 parts of urotropin to 75 of iodoform. The result is an odorless white powder which develops the iodoform odor upon being moistened with water. [This would seem to be probably identical with the iodoformin referred to previously in these columns as being made by a combination of iodoform with hexamethylenae tetramin. Urotropin is formed by a combination of formaldehyde and hexamethylene tetramin. Editor AMERICAN DRUGGIST.]

**Red and Yellow Mercuric Oxide.**—Prof. Ostwald has made an examination of these two substances and is satisfied (*Zeit. f. Physikal. Chemie.*) that the two modifications are not simply isomeric, but that the differences are purely physical, both kinds of the oxide being, according to his own investigations, identical. The solutions of both kinds of oxide in potassium bromide and potassium iodide and sodium hyposulphite are

\* Translated from the *Pharmaceutische Zeitung*, by Otto Hoffmann, A.B., under the direction of Dr. Geo. F. Payne, chairman of the Special Committee of the A. Ph. A. appointed at the Asheville meeting to work for the fuller recognition of pharmacists in the army and navy of the United States. The publication of the series was begun in this journal for September 10 and so far there have appeared descriptions of the position of the pharmacist in the German army (September 10), the German navy (September 25), the Austro-Hungarian service (October 10), the Italian service (October 25), the French service (November 25), the Russian service (December 10), the English service (December 25), and the Swiss service (January 10).



identical in behavior and both develop the same degree of heat on being dissolved in hydrocyanic acid. The darker color of the red mercuric oxide is due, as is well known, to its crystalline structure.

**Varnish for Brass.**—Powdered red shellac of the kind known as stick black in a mortar, put the powder into a bottle and pour 95 per cent. alcohol over it. Stopper the bottle well and shake frequently. After standing for several days the shellac will have been dissolved in the alcohol; now dilute this solution with any desired quantity of alcohol and filter through a fine cloth. If a lighter color is desired this can be obtained by exposing solution to the sunlight; while if a darker color is wished it can be obtained by adding an infusion of saffron in alcohol. If this addition is made to the varnish it will be necessary to again filter.

**Colored Dressings for Iron Stoves.**—These can be made (*Techn. Mit Mitteil. für Malerei*) by using as a medium a mixture of one part of waterglass and two parts of water, and adding any desired color which is not effected by heat, such as white: white lead, or barium sulphate. Yellow: barium chromate, yellow ochre or uranium yellow. Green: chromium oxide, or ultramarine green. Blue: ultramarine. Brown: cadmium oxide, manganese oxide or sienna. Red: ferric oxide, or chromium oxide. To heighten the color bronze powder may be added. The colors should never be applied in less than an hour after they have been mixed.

**Greek Opium.**—A. K. Dambergis, director of the laboratory of pharmaceutical chemistry, at the University of Athens, reports (*Pharm. Post*) that he has examined a specimen of Greek opium produced in the garden of the agricultural school of Athens and found it gives the following yield:

	Per cent.
Water.....	14.83
Narcotin (papaverin, etc.).....	1.81
Morphine.....	13.17
Ash.....	3.49
Residue insoluble in water.....	30.48

Comparison of the above with the results published by Dieterich last year shows that this Greek opium contains more morphine than Chinese, Persian, Indian, and most kinds of Turkish opium.

**A Peculiar Disease.**—For the second time, cases of an infectious disease, affecting the heart, are happening in Paris, traced to imported parrots. Two years ago the entire family, amounting to 10 or 12 persons, in one house, died of the disease, after taking in a parrot from a West Indian collection. On this occasion deaths have occurred at Paris, Maison-Lafitte and Versailles, in each case following the introduction into the house of an imported parrot. M. Nocard, director of the veterinary school at Alfort, states that the disease is due to a very active micro-organism, easily introduced into men or animals. Nocard (*Apotheker Zeitung*) has inoculated animals with the disease (taken from the parrots) and within 24 hours the animals were dead.

**To Dry Flowers in Their Natural Form and Color.**—According to Prof. Pfister (*Zeit. d. Oesterr. Apoth. Vereins*), the following process will yield good results: Dry 2 pints of well washed and finely sifted white sand and over it pour a solution of 45 grs. of sterin, 45 grs. of paraffin and 45 grs. of salicylic acid in 8½ ounces of alcohol, then dry the sand and again sift it. Lay the fresh plants

which are to be preserved in a box and over them pour this prepared sand, so that all the space between the different portions of the plant will be completely filled with sand. Now heat the box with its contents for one or two days to a temperature of 30 to 40 degrees C. and finally pour off the sand. Flowers which have faded can be revived by the use of aniline colors.

**Adulteration of Codeine.**—M. Etiévant calls attention in the *Répertoire de Pharmacie* to a novel adulteration of codeine. In preparing a solution for making syrup of codeine he noticed that a considerable amount of matter, insoluble in alcohol, was present. The residue readily dissolved in water and had a sweet taste. Further examination proved it to be pure cane sugar. The crystalline form of the two bodies is somewhat similar, but not identical, and the adulteration can readily thus be detected. Sugar, further, is dextrogyrate, while codeine is alevoxyrate. In applying the copper test to detect the adulterant, care must be taken to first invert the sugar by boiling with a dilute acid and afterward neutralizing.

**Black Stain for Wood.**—According to the *Pharmaceutische Centralhalle*, the following produces a good black stain: Dissolve 87 grs. each of sodium chloride and copper chloride in 1 liter of water and label solution No. 1; now dissolve 150 grs. of aniline chloride in 1 liter of water and label solution No. 2. Paint the article to be stained with solution No. 1 and when this is dry paint with No. 2. Again paint with No. 1 and with No. 2 and once more repeat the application, so that the wood receives three coats of each solution. Finally rub the surface with a mixture of turpentine and wax, such as is used for polishing floors, or with linseed oil. This stain is particularly valuable for laboratory tables since the black color is not affected by acid nor alkalis.

**The Microscopic Examination of Opium.**—Dr. Mjoen (Ann. de Pharm. and B. and C. D.) has examined 60 samples of opium from the collections in the Pharmaceutical Institutes at Berne and Vienna. From a consideration of his results, he states that the microscope gives the means of determining the origin of the opium as far as Asia Minor, Persia or India are concerned. He gives the following characteristics of the various groups:

- |  |  |
|--|--|
| 1. Containing cellular debris of the epidermis of the pericarp of the fruit..... | Smyrna.<br>Constantinople.<br>Salonica.<br>Clermont. |
| No starch present.....   |  |
| 2. Complete absence of such epidermal debris.....                                | Persia.  |
| Much starch present.....   |  |
| 3. Absence of the epidermal debris.....  | Malwa<br>Patna<br>Benares<br>Punjab.                 |
| No starch present.....   |  |

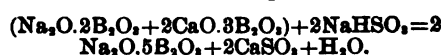
Dieterich has examined 48 samples from the Institute at Vienna, with the following results:

- |        |                                 |
|--------|---------------------------------|
| 1..... | 9.0 — 13.0 per cent. morphine.  |
| 2..... | 4.0 — 6.0 per cent. morphine.   |
| 3..... | 0.45 — 14.4 per cent. morphine. |

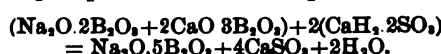
**Antiseptic Value of Sodium Fluoride.**—According to the *Nouveaux Remèdes*, fluoride of sodium (fluorol) is reported by Duclos to be a valuable antiseptic. It is prepared in the form of a bluish white, odorless powder of saline taste. It is preferable to sublimate, which is 16 times more poisonous, also to silver nitrate, formalin and permanganate, for when employed in hypodermic injections it is

painless. In 1 per cent., or even ½ per cent. solution it acts as a powerful germicide. Lagrange states that probably its efficacy as a disinfectant and bactericide is due to the fact that it does not coagulate albumen like sublimate, consequently the microbes are not protected by an envelope of coagulated albumen. It is specially useful in ophthalmic practice; the lachrymal mucous membrane tolerates injections of fluorol without the least reaction, since it is neither caustic nor painful and provokes no irritation.

**Preparation of Boric Acid and of Borax.**—For the preparation of these chemicals the firm of Bettenhausen, Marquardt & Schulz recommend (*Zeit. für Angew. Chem. through Pharm. Review*) a modification of the German patent 72,012. If boronatro calcite is boiled with an aqueous solution of sodium bisulphite all boric acid is dissolved in the form of sodium borate, whereas the calcium remains undissolved as sulphite:



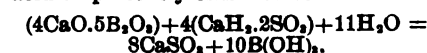
If calcium sulphite is used the reaction is practically the same with but one exception. The calcium of the calcium bisulphite as well as that of the mineral is precipitated as normal sulphite:



Ponderate, calcium borate, when treated with sodium acid sulphite yields sodium acid borate:



However, when treated with calcium acid sulphite it yields free boric acid:



For quantities to be used and conditions to be observed see the original, *Zeitsch. f. angew. Chem.*, 1895, p. 885.

**A Tasteless Quinine Compound.**—Wendt prepares a tasteless quinine compound according to a patented process (*Rundschau*) as follows: dry three parts of quinine (the free base) at 125 degrees C. and then warm with four parts of isovaleryl chloride upon a water bath until complete union is effected. Take up the residue with water acidulated with hydrochloric acid, add an excess of ammonia in the cold, shake out the separated quinine salt with benzol, evaporate the benzol and dry. The resulting isovaleryl-quinine is an amorphous-hygroscopic body which responds to the thalleioquin reaction, is easily soluble in an excess of acid, in alcohol, ether and benzol. The neutral salts of isovaleryl-quinine are difficultly soluble in water while the acid salts are readily soluble; the solutions of the latter being fluorescent. If to an ethereal solution of isovaleryl-quinine an equivalent quantity of salicylic acid is added, isovaleryl-quinine salicylate is precipitated out after a short time. From alcohol this compound crystallizes in regular leaflets; by spontaneous vaporation it forms large well-developed tabular crystals. The compound is anhydrous and permanent in the air; it is difficultly soluble in water and ether and tolerable soluble in alcohol and benzol. The melting point is about 202 degrees C. This compound is tasteless and had been recommended for administration on account of the tonic action of the valeryl radical upon the heart and stomach.



## Easy Methods of Testing the Quality and Proving Adulterations of Vegetable Drugs\*.

BY DR. JOSEPH LAUTERER.

The adulterations of vegetable drugs are not so common at the present time as they used to be 20 years ago, when the crudest sophistications were committed for the sake of a few half-pennies. On the other hand, adulterations are much rarer in this country than they are in Europe, as our wholesale houses import only chemicals of the best description.

Still the pharmaceutical chemist has to be on his guard, especially with respect to medicinal herbs, leaves, roots, barks and seeds, as these might be adulterated, not only through greediness of profit, but also through the inferior skill and little knowledge of the poor old women and children who for a trifle gathered the plants in their native habitat.

The microscope, in revealing the anatomical structure of a vegetable drug, gives in many cases a good evidence of sophistications, and the splendid works of the newest literature makes the best information accessible to everybody; but not every chemist has got time enough for elaborate microscopical researches, whereas short and reliable chemistry work is quite welcome to all of us.

### THREE METHODS OF TESTING.

Three different methods have been used by me as the easiest and quickest, according to the nature of the drugs in question. No complicated contrivances are wanted, and, indeed, these methods can be applied not only in the shop or laboratory, but also in the private residence or in the hotel.

The first method is that of

#### INSTANTANEOUS SUBLIMATION.

It is good for testing articles which contain essential oils, volatile acids or volatile alkaloids. Three instances will illustrate this method. Suppose we have a specimen of cortex cinnamomi or some folia menthae piperitæ with a suspicious aspect or a very weak taste or a strange smell. We then put the sample in the lid of a cocoa tin and heat it over spirit or gas, or even over a candle, till it is apparently dry. Then we cover the lid with a watch glass or with a square piece of plane glass and press glass and lid together with a piece of bent wire, which must serve as a handle at the same time. The heating of the tin is then started again, but it must not be continued too far as the products of dry distillation (phenol, pyro gallo, catechol) would spoil the result. As soon as the temperature rises over 150 degrees, small oil drops will be seen gathering on the under side of the glass, and from the quantity of them, as well as from their specific gravity, their taste and smell, we can make a conclusion on the good or bad state of the drug. If the oil drops swim on water the cinnamon bark has been deprived of its oil and has been impregnated with a cheaper mixture of ol. cassiæ and ol. terebinth, as the smell of the cassia oil, like that of the lemon oil, prevails over the smell of the turpentine oil.

#### TESTING VOLATILE ACIDS.

A second instance where simple sublimation is used with advantage refers to

the volatile acids. Gum benzoin, as well as many unofficial resins like grass tree resin, gum resin of eucalyptus maculata, liquid styrax (much used in Europe for the cure of itch), can in this way well be examined with regard to their age and good quality.

If heated in the tin lid covered with a watch glass, the benzoic acid is sublimated on this latter, and the minute rhombohedral crystals can easily be recognized with an ordinary pocket lens.

Drugs containing volatile alkaloids form the third instance for being tested by sublimation.

Kola nuts (*Sterculia acuminata*) from our wholesale shops look very unprepossessing, old and dusty, but if they are put in the tin lid and heated, beautiful acicular crystals of caffeine are deposited inside of the watch glass, indicating sufficiently the good quality of the nuts.

Exhausted tea leaves are often sold for good ones. The sublimation test shows this sophistication instantaneously.

#### TESTING BY PRECIPITATION.

A second method of quickly ascertaining the quality of vegetable drugs is applicable to nearly all organic chemicals containing alkaloids or glucosides as active constituents. It is based on the amount of apparent precipitate formed in an infusion or watery solution of an organic substance on addition of more or less tannic acid dissolved in water. The roots, leaves, seeds, extracts and tinctures of belladonna, stramonium, hyocyamus, duboisia and nux vomica, as well as the barks of cinchona and remijia, are easily tested in this way, and, in comparing the amount of precipitates produced in solutions of questionable preparations with the amount given by an acknowledged good standard specimen, we arrive at quite satisfactory conclusions in less than an hour's time.

#### COLOR REACTIONS TESTS.

A third method for proving sophistications and deteriorations of pharmaceutical material is given by the color reactions produced in watery solutions or decoctions of vegetable drugs on addition of certain inorganic salts. The method is best adapted for crude vegetable drugs, containing not only the active principle, but a number of concomitant substances, which characterize the drug, and which, when found, establish the presence of the active principle. For instance, if in a natural product meconic acid can be proved to exist, this natural product can be nothing else but opium, as no meconic acid has been found in any other natural substance. In the same way, if by color reactions you detect caffeo-tannic acid in a vegetable drug, it must be derived from the coffee tree, as no other plant on earth contains this special tannin. On the other hand, if in a decoction of fresh or roasted coffee beans a solution of caustic potash does not show by a golden yellow color reaction the presence of a yellow vegetable dye derived from chlorophyll, the beans have certainly been deprived of their caffeine, as this yellow dye is always contained in unadulterated coffee. For marking properly with color reactions broad daylight is absolutely necessary. The test tube is not good enough, and all reactions must be made on the back of a photographic opal plate, or on a perfectly white china saucer or table plate, which will show the slightest nuances, not perceptible at all in a test tube.

#### TANNIC ACID A FIRST CLASS TOUCHSTONE.

As the tannic acid is a concomitant of most vegetable drugs, and as it gives different color reactions to ferric salts and to caustic potash, its absence or presence, and its special nature forms a first class touchstone for improvisatorial qualitative analytical chemistry.

#### TO DISTINGUISH BETWEEN TRUE AND FALSE DIGITALIS.

The caustic potash is at the same time an excellent reagent for vegetable dyes. Caustic potash and ferric chloride are indeed the only chemicals which, besides sublimation and precipitation with tannic acid, are needed as color reaction tests for all pharmaceutical drugs, and for proving their nature and purity.

The digitalis leaves from Europe, for instance, have been found in America by Professor Maisch to be adulterated with leaves of *Solanum tuberosum* and *S. nigrum*, which in the dry state bear some resemblance indeed to digitalis leaves. The anatomical character, especially the difference in the stomata, would establish the fact, but we might spend a whole day before arriving at a satisfactory result. My color reaction method shows the sophistication in five minutes. The suspected leaves are picked out, boiled in the smallest possible quantity of water, and a few drops of the infusion are put on two different opal plates. If ferric chloride produces on one plate a green coloration, the leaves cannot be *solanum* leaves. If caustic potash solution changes the color of the infusion on the other plate to a golden yellow, the leaves have been true digitalis leaves.

If ferric chloride produces blue coloration, the leaves cannot be digitalis leaves. They might be *solanum* leaves, which must be found out by the form and by the microscope; but the adulteration is proved by the color reaction alone.

#### A New Method for the Quantitative Estimation of Caffeine in Tea Leaves.

Van Ledden Hulschebosch has recently described (*Pharm. Weekblad*, December 14, 1895) a new method for estimating quantitatively the caffeine in tea leaves. He claims that the various methods which have been recommended for this purpose are all very troublesome and require more time than is necessary for the complete extraction of the pure alkaloid. Herlant has given the most simple and practical method, so far, in which the ready solubility of caffeine in a 5 per cent. solution of sodium benzoate is utilized. The mixture of tea and lime is macerated with the solution twice in succession; the filtrate is then treated with sodium carbonate so as to get rid of the lime, while at the same time a portion of the coloring matter is precipitated. The filtered solution is shaken out three times with chloroform. The results obtained from this method are satisfactory, but unfortunately the mixture of tea and lime is not entirely extracted while a portion of the sodium benzoate solution containing alkaloid in solution remains in the residue.

Van Ledden Hulschebosch points out that caffeine is soluble in 20 parts of a 5 per cent. sodium benzoate solution; and that therefore with an alkaloidal content of 2 to 8 per cent., 2 to 8 ccm. of this solution are sufficient to dissolve all of the caffeine present. Herlant, however, uses 75 ccm.

\* Chemist and Druggist of Australasia.

and at the same time the amount of lime water used is too large. For the solution of 150 mg. of caffeine from 5 gm. of tea 7.5 ccm. are quite sufficient (according to Van Ledden Hulschebosch caffeine is soluble in 50 parts of lime water).<sup>\*</sup> Upon this property the author bases a new method, which he describes as follows:

Mix 5 gm. of dry powdered tea with 1 gm. of calcium hydrate and digest with 100 ccm. of water in a tared Erlenmeyer flask; allow it to cool and replace the water lost by evaporation. Filter and in 50 ccm. of the filtrate dissolve 0.5 gm. of pure anhydrous sodium carbonate, filter and evaporate the filtrate to about 15 ccm. Place the solution so obtained in the extraction apparatus designed by Van Ledden Hulschebosch, and described as a "perforator" in the AMERICAN DRUGGIST for December 10, 1898, page 815. Rinse the capsule with a little water; add this to the other solution, and extract with ether for three hours. Then drive off the ether from the receiving flask dry, the snow white residue, at 100 degrees C. and weigh. The yield, according to Herlant's method is about 2.42 per cent., and according to Van Ledden Hulschebosch's method 2.58 per cent. The author commends this method for notice in connection with the determination of the alkaloid in coffee, cacao and kola.

### The Detection of the Newer Medicaments.

Professor Dragendorff, in order to facilitate the isolation of the more recently discovered medicines from various complicated mixtures, such as portions of the body, of the blood or of food, has published in the *Archiv. der Pharmacie* (8, p. 288) the results of a large number of experiments which have been carried out by his students. In addition to the various tests of identity and methods of separation he lays considerable stress upon spectroscopic investigation. From the matter which he has published upon this subject we take the following brief summary of some of the identity reactions:

#### Esters of Guaiacol, Naphtol, Cresol Etc.

The recognition of these combinations, so long as they are not broken up, does not present very great difficulty since they can be shaken out of acidulated aqueous solutions either by petroleum ether or by benzol. It is unfortunate that many of these compounds are insoluble in acidulated water. For complete separation, in medico-legal cases, Professor Dragendorff therefore recommends that to the portions of the body to be examined after being chopped up and acidulated with sulphuric acid 4 to 5 volumes of alcohol be added, the whole allowed to macerate from 12 to 24 hours, then filtered and the alcohol removed by distillation. The residue from the distillation is not to be again filtered before being shaken out. The characteristic reactions of the various substances are as follows:

#### BENZOSOL (BENZOYL-GUAIACOL).

After being moistened with sulphuric acid, benzosol yields, under the influence of acetone vapors, or of acetol (acetone alcohol), a beautiful cherry red to purple red color, which is recognizable in the presence of 1 mg. of the substance.

<sup>\*</sup>See the paper by E. H. Gane on page 43 of this issue.

Salol gives only a yellow color. A mixture of benzosol with sulphuric acid gives, with solution of ferric chloride, a violet color striped with green to blue; upon addition of a trace of nitric acid this turns to orange and green; on addition of potassium nitrite to green, violet and yellow, and of amyl nitrite in alcohol solution to green. Cane sugar and grape sugar color the mixture of sulphuric acid and benzosol a bright red. Fröhde's reagent takes at first a violet, then a red color, the mixture later turning green in the presence of as little as 1 to 60,000.

Vanadium sulphate causes a green coloration with benzosol.

#### GUAIACOL SALOL (GUAIACOL SALICYLATE.)

In an alcoholic solution guaiacol salicylate is colored violet by ferric chloride and a bright red by not too concentrated sulphuric acid. If to a mixture of the salicylate with sulphuric acid, nitric acid is added the mixture turns green, then violet and finally wine red. Amyl nitrite also turns first red and later to a permanent green color when mixed with sulphuric acid and an alcoholic solution of the salt. On mixing guaiacol salicylate with sulphuric acid and adding potassium nitrite a green color is developed which turns blue with streaks of red and gradually the entire mass assumes a wine red color. This reaction is sensitive in the presence of 1 part in 60,000. Vapors of acetone or acetol when in contact with guaiacol salicylate, moistened with sulphuric acid, produce a bright red color, if as much as 1 part be present in 7,200. Vanadium sulphate when mixed with the powdered salt turns it green then to a blue black color. Fröhde's reagent gives at first violet streaks which turn later to an emerald green color, if the ester be present in the proportion of 1 to 80,000. On mixing an alcoholic solution of the salt with vanadium sulphate a green color is evolved which turns bluish (1 part in 180,000).

#### STYRACOL (CINNAMYL GUAIACOL).

Styracol dissolves in concentrated sulphuric acid with a yellow color. This solution turns orange on the addition of nitric acid, and violet streaked with green on the addition of potassium nitrite. Acetone vapor or acetol also causes the appearance of violet streaks. The addition of styrcol to vanadium sulphate and Fröhde's reagent also causes violet and green colorations. To differentiate from benzosol and guaiacol salicylate their behavior toward soda solutions and permanganate can be used in addition to the difference in the behavior of these bodies toward petroleum ether. While the two bodies named are readily soluble in this liquid, styrcol is very difficultly so.

#### GUAIACOL.

The author differentiates between the two kinds which are known to commerce and gives the following as characteristic reactions of *crystalline guaiacol*; sulphuric acid dissolves it without any color. Sulphuric acid with a little nitric acid yields a red solution turning brown on heating; with sulphuric acid and a trace of potassium nitrite violet and green streaks are formed. Sulphuric acid with ferric chloride gives green, blue and finally violet streaks. Sulphuric acid (140) with potassium selenate (1) gives a green solution (with styrcol this solution is yellow). Vanadium sulphate gives blue, green and violet streaks. Fröhde's reagent gives at first green and violet streaks and later a bluish green

mixture. Ferric chloride added to an alcoholic solution of guaiacol gives, with traces of ferric chloride, blue and emerald green, and with larger quantities a deep green color. Small quantities of hydrochloric acid and potassium permanganate give a cherry red color, which turns brownish.

*Liquid guaiacol* dissolves in sulphuric acid with a purple color which later turns yellow. In sulphuric acid with a little hydrochloric acid it dissolves with a deep brown and later reddish brown color. In sulphuric acid with a trace of potassium nitrite it gives violet and green streaks. In sulphuric acid with ferric chloride it gives the same reaction as crystallized guaiacol. With sulphuric acid (140) and potassium selenate (1) it gives a dirty greenish brown color gradually turning violet. With vanadium sulphate it gives an olive green. With Fröhde's reagent it gives at first violet and green rings, followed by a fine violet color. With ferric chloride in alcoholic solution of liquid guaiacol the reaction is the same as with crystallized guaiacol. With a small quantity of hydrochloric acid and potassium permanganate it turns brown immediately.

(To be continued.)

### Test for Chlorates.

In the *Journal de Pharmacie et Chimie* (Pharmaceutical Journal) G. Denigès publishes a formula (resorcin, 1 gm.; water, 100 c.cm.; sulphuric acid, 10 drops) for the detection of chlorates when present in a solution varying in strength from 1 in 1,000 to 1 in 50. The manipulation is as follows: 1 or 2 drops of the liquid containing a chlorate and 2 c.cm. of pure sulphuric acid are poured in a test tube, the mixture is cooled by plunging the tube in cold water and then shaken; to this add, without agitation, 5 drops of the above resorcin reagent, then cool again with cold water and gently shake. If chlorates are present a green coloration is obtained. The same operation will produce with nitrates a faint yellowish tinge, changing to violet-red on heating. Nitrates, however, give an intense violet-blue tint, and in the presence of this acidulous radical it would be necessary when searching for chlorates to modify the process as follows:

To 2 or 8 c.cm. of the saline solution add half its volume of ammonia solution, filter if necessary, supersaturate with acetic acid, evaporate till only 4 or 5 drops remain, then add to this residue 10 or 15 drops of water, and, on testing for chlorates with the resorcin solution, the green coloration will be produced. A tenth per cent. of chlorate can be thus detected in a liquid containing 1 per cent. each of nitrate of sodium and nitrate of potash. If chromates or permanganates are present, the solution should be first treated with ammonium sulphhydrate, filtered, supersaturated with acetic acid, boiled, and refiltered. Iodides should be previously eliminated by lead acetate. The author states that the above test has a decided advantage over the sulphate of aniline reaction, as it does not affect bromates; it is, besides, a very delicate one, so much so that it is preferable to dilute the solution for analysis in order to obtain the characteristic green coloration.

Read the Review of the Wholesale Market and keep posted on prices. A dollar saved is a dollar gained.

### The Separation and Identification of Ptomaines.\*

The ptomaines or cadaveric alkaloids are known to arise through the decomposition of albuminoid substances under the action of decay, appearing as combinations, the properties of which in many cases approximate those of certain vegetable alkaloids. Thus far 60 different ptomaines have been isolated and examined. There are solid as well as liquid ptomaines, highly toxic and perfectly harmless ptomaines, while all exhibit an alkaline reaction and combine with acids to form salts. For their production, the best mode of procedure, according to Selmi, is as follows:

#### SELMI'S PROCESS.

The material is reduced to fine powder, and subsequently acidulated with tartaric acid, heated for 24 hours to 70 degrees C. with double its volume of 90 per cent. alcohol (on water bath and return flow condenser), and the warm liquid filtered by pump. By distillation *in vacuo* at 28 to 30 degrees C. the alcohol is removed; the aqueous residue is then filtered, the filtrate exhausted with ether, then mixed with powdered glass and dried *in vacuo*. The residue is repeatedly extracted with alcohol, and the alcohol distilled off *in vacuo*. The residue is taken up with water; the liquid (filtered if necessary) is rendered alkaline with sodium bicarbonate and extracted with ether, benzol and chloroform. The solutions obtained are first evaporated on the water bath to a small volume and then permitted to evaporate spontaneously.

#### FIVE CLASSES OF PTOMAINES.

The following is a convenient division of the ptomaines, five classes being recognized:

1. Such as pass over into ether from acid solution. With tannic acid, as well as with potassium iodide, they yield reactions similar to those of the alkaloids. Gold chloride yields no precipitate; nitric acid imparts a yellow color. Ptomaines of this class may be confused with digitalin, which is also absorbed by ether from acid solution. For their identification, therefore, the residue is treated with sulphuric acid; a rose color results, which is rendered a malveaceous red by bromine vapor.

2. Ptomaines which pass over into ether from alkaline solution. With iodic acid, decomposition results (like morphine) with phosphomolybdic acid, a violet color changing into blue; with platinum chloride, a precipitate.

3. Ptomaines which are not withdrawn from alkaline solution by ether, but are by chloroform. They are readily decomposed; all possess a bitter burning taste and are reduced with iodic acid. Iodine in potassium iodide yields crystalline precipitates; sulphuric acid and Fröhde's reagent produce a red color.

4. Ptomaines which are insoluble in ether and chloroform, but are removed from alkaline solution by amyl alcohol. With hydriodic acid, needle shaped crystals are formed; iodic acid is not reduced; the usual color reactions for alkaloids do not follow.

5. Ptomaines which are not extracted with ether, chloroform or amyl alcohol, but are soluble in water. They are almost tasteless and yield no reaction with sulphuric acid, gold chloride, mercuric chloride or hydriodic acid.

### The Causes of Death in Pneumonia.

Dr. Bolinger maintains that croupous pneumonia is a typical local infectious disease, pursuing in the majority of cases a very regular course. It is not dangerous on account of the duration or the intensity of the fever. The impairment of the function of the lung is likewise insufficient to explain death. The oedema so frequently found in the parts of the lung spared by the disease is not the result of a passively increasing collateral hyperæmia, but of cardiac failure. The collapse symptoms in croupous pneumonia and the fatal weakening of the heart are dependent on oligæmia, which leads to impaired nutrition of the cardiac muscle, already weakened by the fever and the extra demands upon it. Anæmia of the brain may cause disturbances of innervation of the heart, and this may be an additional factor. The exudate into the lung tissue may be likened to a venesection produced by the pneumococcus, which in a few days deprives the blood of a large quantity of important constituents. The reason why death takes place so early, and usually in the same stage of the disease, from the sixth to the eighth day (corresponding to the transition from red to gray hepatization), is probably because the exudate has to attain a certain acme before life is imperiled. If these facts are applied to therapeutics, it follows that, in addition to the usual treatment of pneumonia, every effort should be made to combat the oligæmia. Large quantities of fluids should be supplied to the system through every available channel, even in the form of saline infusions. This should be done at an early period, before collapse symptoms have manifested themselves.—*Münchener medicinische Wochenschrift*.

#### Liquid Air.

At a recent meeting of the Chemical Society, Professor Dewar exhibited a portable apparatus for making liquid air or oxygen, and showed that by attaching a silver flask, containing about a liter of liquid air, to a pump, within 20 minutes they could reduce it to a solid.

He then referred to experiments made in order to determine the corrected density of oxygen. Following the classical researches of Joule and Playfair on the coefficient of expansion, he had made use of liquid air for taking the specific gravity of a number of bodies. A silver ball was immersed in a flask of liquid air. On withdrawing it immediately it was observed to be quite dry, owing to the liquid around it assuming the spheroidal state. On replacing it in the liquid, after some minutes a distinct hissing sound was heard, which indicated the point where the ball had reached the same temperature as the liquid. In this manner the figures for bismuth (1.3), platinum (1886) and a number of others had been obtained. These led to the calculation that oxygen had a constant density of 1867.

An

#### INTERESTING LECTURE EXPERIMENT

was next shown. A sealed flask, containing the vapor of bromine, was exhibited, and the top was rubbed slightly with a cotton wool mop dipped in liquid air. Gradually the red color faded away as the temperature in the flask was re-

duced by the evaporation of the liquid air. This was explained as due to the liquefaction and subsequent solidification of bromine, which, in the solid state, forms beautiful red crystals. Solidified nitric oxide looks like copper sulphate.

Finally Professor Dewar pointed out some of the difficulties in the way of obtaining liquid hydrogen. Air was cheap enough, but the case was different with pure hydrogen. Then again, a very large amount was needed owing to its excessive lightness, and, said the professor, "The expense is awful." It was quite evident that he still hoped to get over these difficulties.

#### Cochineal.\*

##### EARLY PROPAGATION OF COCHINEAL.

The introduction of the cactus and cochineal into the Canary Islands is interesting and worth relating as it is not generally known. A native gentleman brought them from Honduras in the year 1885, at a time when the vines were flourishing, and no other crop was thought of at such a time of success. His friends considered him a simpleton, and the country people destroyed his plantations at night. The Government, however, supported him and in spite of occasional disturbances, the cochineal and cactus were preserved in out-of-the-way places in the islands. As time passed on, the vine disease made its appearance and spread over the district. The fruits withered and plants died, and the inhabitants had only the alternative of starvation or some new path of industry. They now turned their attention to the despised cochineal; and tried the experiment of cultivating it in the old vineyards. It succeeded perfectly. The insects propagated rapidly, and soon became a profitable crop. A great enthusiasm now followed the old contempt of cochineal; spare land, fields, and gardens, were all turned to account in its cultivation, and in six months after setting out the leaves the harvest began, and for some time the industry flourished, fortunes were made, and the prosperity of the islands was assured. This cochineal is an important dyeing material and is composed of the dried bodies of the insect bearing the same name.

##### FOOD OF THE INSECTS.

The Canaries, consist of seven islands, the most important of which is Gran Canaria, 120 miles in circumference. Las Palmas is the seat of Government, and for other reasons is an important place, and being on the slopes of two mountains in a delightful valley covered with palm trees and highly cultivated, extending to the sea, it is most attractive for visitors. The whole island is in a perfect state of culture—pasture lands on the heights, corn and cochineal in the valleys—so that altogether this island is the richest of the group. Arucas stands 700 feet above the sea level, built around the base of a crater; its great product and chief trade is cochineal, and the fields of *opuntia*, upon which the insect feeds and is reared, present a strange sight. The name of the plant is the old Latin term used by Pliny, and said to be derived from the city of Opus. The cultivation of the plant is easy, as it grows freely in sunny spots; the only thing detrimental to its welfare is a superabundance of moisture, but this

\* *Bulletin of Pharmacy.*

\* *Produce World.*

never happens in the Grand Canaries. The plants are called by the Spaniards Toona; but the insect does not confine itself entirely to the cacti, but feeds on other succulent plants, and the difference of quality in the article depends entirely on the plant on which the insect feeds. The prickly pear so abundant in Jamaica, is covered with them; but not having their more suitable and proper food, they are in general diminutive and have very little red tincture in their bodies. The delicate red juice of the fruit is the natural food of the insect. Its exuviae and animal salts are, from the minuteness of its body, inseparable from the essential principles of the dye, and tend to diminish somewhat the brilliancy of the color. On this account attempts have been made to obtain the inspissated juice of the plant directly from itself.

#### NATURAL HISTORY OF THE COCHINEAL INSECT.

The cochineal insect is small and was for long mistaken by Europeans for some kind of grain or seed, but it really belongs to the sub-order Hemiptera, and to give it its scientific name is *Corus cacti*. The males are carmine red with light brown wings, and the bristles are two and one-half times longer than the body, which is three fourths of a line long; while the female is one line in length, rounded in form and covered with a heavy bloom. Some idea may be obtained of its size when one pound of cochineal is calculated to contain 70,000 insects; in a dried state each one is estimated to weigh one-tenth of a grain. The female is apterous and is found in the proportion of 150 to 200 to one of the male sex. The former remains fixed in the cactus and lives there; her skin secretes a soft kind of envelope, in which she deposits her eggs, after which she dies, and nothing remains of her but a handsome membrane, which protects the eggs. The male alone is able to move.

#### CULTIVATION AND COLLECTION OF THE INSECTS.

In Guatemala, in order to produce cochineal, it is necessary to prepare the land, and to plant rows of cacti at a distance of about two yards apart in lines; these are allowed to grow to a certain size, when the insects are placed on them. The eggs are then laid and hatched. They are very numerous, and only a small number of female insects are needed on each leaf. Before the rainy season commences, branches of the cactus plant covered with these insects are cut off and stored in buildings to protect them from the weather. When the wet season is over, the plantations are stocked from these supplies; little nests of some vegetable fibre, each containing a few females, are placed on the cacti. When the eggs are hatched, the young females are soon developed, and spread over the plants attaching themselves to the leaves, and present the appearance of being vegetable excrescences rather than living insects. They become covered with a cottony substance. The first crop of pregnant females—only these being valuable for cochineal—is gathered in December, and several more crops are obtained until the following May. In the Canaries, it is usual to rear in the winter, and put out on the cactus leaves from May to July. Small gauze bags containing the insects are hung on the cacti in the same way as in Guatemala. In August and September they are collected, and a walk

in the streets of Arucas at this season will show the activity present on all sides. The insects are collected on large, flat trays, and those gathered in one day are placed in the evening in an oven heated to 150 degrees F. They are afterward exposed to the heat of the sun, and by hot irons and boiling water are made black. This is also done by placing the insects with some black sand in a linen bag several feet long, which two men swing backward and forward until the juice exudes, rendering the insects black, after which they are dried, and again shaken with sand to give the cochineal brilliancy. According to the way in which the insect is killed and dried, the product is known in commerce as silver or black; an inferior kind being sometimes called foxy. In the locality what is known as *madres* or mothers—also called grey cochineal, which being chiefly all coloring matter—is considered the purest. The full-grown young insect is called silver, and is dried with stones, while the *negra* is the black.

The insects themselves scarcely yield 10 per cent. of pure dye, although the amount is generally supposed to be greater. The most productive, and therefore of greater value, are those that are carefully cultivated in plantations of their favorite plant, but an inferior sort is very common in the woods, feeding on a thorny cactus. This is called wild cochineal, but even when introduced into the plantations, it remains inferior, and is sold at a lower price. Wild cochineal yield one third less coloring than the fine. The species called *granilla*, or dust, is supposed to be principally made up of the inferior kind. This industry has suffered very much through the introduction of aniline dyes; to prove this, it need only be stated that the amount of cochineal exported from the Canaries in one year amounted to 6,810,600 pounds, valued at £842,921, and a few years later, after the introduction of anilines, it only reached 1,449,968 pounds, valued at £78,521, and at the time of my sojourn cochineal was selling in the islands at from 7 to 10 pence per pound, a price which did not pay for production. Formerly one acre of ground planted with the cactus yielded, under favorable conditions, from 800 to 500 pound of cochineal, worth from £75 to £100 in cash. This is a sad condition, affecting the prosperity of the islands, as it is on record that the Canaries have, even from remotest times, been noted for the production of dyes. One dye has been produced here for a period, and then given place to another. In olden times a scarlet dye was extracted from the dragon tree in the form of a gum or resinous exudation, which was called by the Arabs dragon's blood. This was most rare and extremely difficult to collect, as the trees producing it were of slow growth and never very plentiful.

#### The Manufacture of Citric Acid.

Citric acid owes its name to the source of its manufacture, "citrus" being the generic term for lemons. The acid occurs, however, in the juice of many other fruits than those of the citron variety, as well as in the juice of many plants. The citric acid of commerce, however, is mainly prepared from the lemon, bergamot, and lime, the three leading species of citron. Of these three,

the lemon contributes by far the greater proportion. In its manufacture the rind is removed and utilized for the purpose of obtaining the essential oil. The fruit is then pressed to obtain the juice. What is technically known as the "single juice" is then boiled down until a syrup of a dark brown color, of a specific gravity of 1.24, is obtained. The juice has its greatest acidity in November. It contains from 11 ounces to 18 ounces of citric acid per gallon.

The manufacture of citric acid from "single juice" is simple. Coarse chalk is mixed with water and heated by steam in a wooden vat provided with an agitator. The concentrated juice is then pumped slowly in until effervescence ceases, care being taken that the chalk is always in excess. The precipitate that follows is known as calcium citrate. This is washed with hot water and filtered. It is mixed into a thin cream by the addition of water, and constantly agitated during decomposition, caused by the addition of a small excess of sulphuric acid. This forms lime sulphate or gypsum, which is insoluble and precipitates. The citric acid left in solution is then separated from the gypsum, and the liquid concentrated in shallow baths by the aid of heat. Much gypsum is at first deposited, and from this the clear liquor is run off into other vessels and further concentrated. When sufficiently strong to crystallize, the hot liquid is run into a tub provided with an agitator, and the liquor is kept in constant motion while cooling. By this means the crystals of citric acid are obtained in a fine powder. The mother liquor is again concentrated and the process repeated. The granulated crystals are drained, and, should impurities show themselves, they are redissolved in water and the solution decolorized by passing it through animal charcoal, from which all phosphates have been removed. The liquid is again concentrated by heat and allowed to crystallize in shallow trays. The resulting crystals are the citric acid of commerce.

Citric acid is also contained in almost all unripe fruits, notably the currant, gooseberry and tomato. No successful method has been discovered, however, of making its manufacture from these fruits profitable in a commercial way. In France the industry is carried on to a limited extent.

#### Extracting Gold from the Ocean.

It is well known that gold is present in sea water as gold iodide in a slight amount, about 0.9 grains per ton, but when all of the gold existing in sea water is estimated it represents about \$80,000,000,000,000,000. H. C. Bull (*The Brooklyn Manufacturer*) has recently patented a method for extracting the gold from sea water, which consists in passing the water through a tube or conduit of wood or other suitable non-conducting material. Anodes of carbon, iron or other suitable material are placed in the tube and connected to an electric cable which passes along the bottom of the tube. The cathode consists of a strip of iron extending along the bottom of the tube, and is electrically connected with a suitable conductor. The cathode is provided with a number of cups or rings of insulating material for holding mercury. On entering the tube the sea water mixes with potassium cyanide or hydrochloric, oxalic or other acid, which decomposes the gold iodide contained in the water. On passing through the tube



the gold is deposited on the mercury. By subsequent treatment the gold is separated from the mercury, which is used over again.

### Colored Films for Show Carboys.

T. Maltby Clague has had the usual experience with the breaking of show bottles in cold weather, and the subsequent ruin of the contents of the window. Being averse to dispensing with these time-honored symbols of an historic past, and having occasion to place the show bottles in his windows in a position where no adequate support could be furnished for the heavy weight of the bottles or globes when filled with water, he therefore made attempts to coat the inside of a carboy with a colored film, which would suit the requirements of window display. He gives his experiences in the *Pharmaceutical Journal*, in the hope that some—

Forlorn and shipwrecked brother  
Seeing may take heart again.

Perhaps others have solved the problem for themselves, but he decided to rush into print when he saw that a druggist in a neighboring town was obliged to find refuge from his difficulty by keeping an empty uncolored carboy in his window.

First, solutions of shellac and aniline dyes in methylated alcohol were tried, but the tendency to chip off was found to be an objection. Next, the dyes were tried, dissolved in alcohol, and the solution combined with ether and gun cotton to make a collodion film. This was partially successful, but the difficulty was to get the film free from rolls and thick-nesses.

Lastly, gelatin was adopted as a basis, and after some experiments the following formula was found to work well. For a 5-gallon carboy:

Aniline dye.....	grains xv to xxv
Gelatin (not opaque).....	1 ounce
Water.....	6 ounces
Carbolic acid.....	3 j

Soak the gelatin in water, dissolve the dye in warm water, and next add the softened gelatin and warm till melted, then add the carbolic acid. When the solution has cooled to about 150 degrees F., pour it into the carboy. Place the carboy in a warm position until it has acquired a temperature of from 90 to 100 degrees F., and then remove; now keep turning it upside down and round about until the gelatin shows signs of setting, then put it on its stand and allow the jelly not adhering to the sides to settle at the bottom. Leave the stopper out for a few hours. If the first attempt is not a success, it is only necessary to put the carboy into a warm place and try again. The process is an easy one, and has been applied to half a dozen carboys with ease and success.

As to the colors the following have been tried:

**Malachite green**, a good color to work with, and strikingly like sulphate of copper solution; about 25 grains to 6 ounces is required. The color fades somewhat, so that it is well to make it a trifle dark.

**Methylene blue**, 15 grains; a rich color very like ammonio sulphate of copper.

**Methyl violet**, 15 grains, a rich bluish red; can be made to vary according to the dye used. Technically, R means red, R.R. redder, R.R.R. still redder. The blue shades are similarly indicated by the affix B.

**Flamingo** gives the nicest red of those he has tried, 15 grains.

**Browns** may be got with Bismarck brown; brownish yellow with the same dye in smaller proportion, but the colors are not so striking as those named earlier. Methyl orange is wanting in brightness and transparency.

Of course, if the window is exposed to sun, the film must be allowed to harden well before being placed in its position. The carbolic acid or some other preservative is required to prevent molds from liquifying the gelatin. The weight of a 6-gallon carboy is thus reduced from 70 pounds to 10½ pounds, and the ease in handling and safety when in position are great gains. Nothing is sacrificed in appearance, and if you don't tell anybody nobody will know.

### Remedies Brought Out in the Past Year.

While the majority of the remedies listed below have already been described at some length in these pages, it may be of interest to print this summary, which is based on one recently published (*Am. Med. Surg. Bull.*), but which omits a few articles which were really introduced prior to 1895. The size of the list is very formidable, but it will no doubt be found, as it has been heretofore, that only a very small number of these remedies ever come into practical use, while a still smaller number may possibly win a permanent place in our materia medica.

**Adhesol**.—Mixture of copal resin (85), gum benzoin (8), balsam tolu (8), ether (2), oil thyme (2).—Surgical dressing.

**Airol**.—Bismuth oxyiodogallate.—Surgical antiseptic.

**Akolethe**.—Proprietary "solution of the sedative principles of opium."

**Alpha-cresote**.—Mixture of normal constituents of creosote, containing 25 per cent. of crystallized guaiacol.

**Alpha-guaiacol**.—Crystallized synthetic guaiacol.

**Aminol**.—Solution of calcium oxide, sodium chloride and trimethylamine.—Antiseptic.

**Ammonium Glycerinophosphate**.—Nervine.

**Ammonium Persulphate**.—Antiseptic and deodorant.

**Ammonol Salicylate**.—Analgesic and antirheumatic. Dose: 0.5-1.5 gm. (7½-28 gr.).

**Amygdophenin**.—Para amidophenol amygdalate.—Antipyretic and analgesic. Dose: 1 gm.

**Anhalonine Hydrochlorate**.—Spastic and nervine, like strychnine.

**Aniline Sulphate**.—Internal cancer remedy. Dose: 0.1 gm., gradually increased to 0.8 gm., daily.

**Anthion**.—Compound consisting chiefly of potassium supersulphate. Substitute for Javelle water or hydrogen peroxide in photography.

**Anticancerin**.—Prof. Emmerich and Scholl's cancer serum used in erysipelas.

**Antinosin**.—Sodium salt of nosophen.—Antiseptic.

**Antiphlogistine**.—Proprietary antipyretic.

**Antipyonin**.—Sodium tetraborate or polyborate.—Antiseptic.

**Antistreptococcin**.—Serum preparation used against erysipelas.

**Apolysin**.—Monoparaphenetidine citric acid.—Analgesic and antipyretic. Dose: 0.5-1.5 gm.

**Argonin**.—The soluble silver casein salt

obtained by treating a solution of casein-sodium with silver nitrate.—Antiseptic and astringent, like silver nitrate.

**Baptolene**.—Compound antiseptic solution.

**Bismuth Oxyiodogallate**.—See Airol.

**Bismuth Phosphate, Soluble**.—Contains 20 per cent. bismuth oxide.—Gastro intestinal antiseptic. Dose: 0.2-0.5 gm.

**Bismuth Pyrogallate**.—Known also as "Helcosol."—Succedaneum for pyrogallol internally.

**Bismuthol**.—"Bismuth-sodium phospho-salicylate;" soluble bismuth phosphate.—External astringent and antiseptic.

**Borine**.—Compound antiseptic solution.

**Borsalicyl**.—Result of the action of boric acid (25) on sodium salicylate (82).—Antiseptic.

**Bromhemol**.—Bromated hemol.—Antiepileptic.

**Bromophtharin**.—Mixture of calcium and iron oxides, calcium carbonate and sulphate, sodium sulphate, sand and yellow coloring matter.

**Byrolin**.—Antiseptic ointment and cosmetic in collapsible tubes.

**Cæsium Bitartrate**.—Nervine and cardiac.

**Cæsium Bromide**.—Nervine and cardiac. Dose: 0.2-0.8 gm.

**Calcium Borate**.—Antiseptic astringent. Dose: 0.8-0.4 gm. (in children).

**Carniferin**.—"Compound of iron and phosphosarcosolactic acid."—Hematinic. Dose: 0.5 gm. per day.

**Casein Ointment**.—Casein (14), potassium and sodium hydroxide 4:1 (0.48), glycerin (7), vaselin (21), salicylic acid or borax (1), and water (56.57).—Dermic vehicle.

**Chlorolin**.—Mixture of mono and trichlorophenols.—Antiseptic and disinfectant.

**Citrophen**.—Paraphenetidine citrate.—Antipyretic and analgesic. Dose: 0.5-1 gm.

**Cocaine Alum**.—Crystalline compound of cocaine and aluminum sulphates.—Local anesthetic and astringent.

**Collesin**.—Professor Schiff's skin varnish.

**Copper Resinate**.—Compound of cupric sulphate and resin, introduced as a remedy against fissured hoofs in veterinary medicine.

**Cotarmine Hydrochlorate**.—Salt of a base obtained by fractionation of narcotine.—Hemostatic.

**Creosal**.—Compound of creosote and tannic acid.—Astringent and antiseptic. Dose: 8 gm. (representing 1.8 gm. creosote) per day.

**Creosote Calcium Hydrochlorophosphate**.—Antitubercular and antiscrophilitic. Dose: 0.1-0.8 gm., in emulsion.

**Crystallose**.—Sodium salt of pure saccharin.—Sweetener.

**Cutin**.—Substitute for silk or catgut; prepared from the gut of cattle.

**Cupratin**.—Organic copper compound analogous to ferratin, containing 6 per cent. of cupric oxide.—Nervine.

**Cuprohemol**.—Copper hemol.—Succedaneum for the older copper compounds in tuberculosis, scrophulosis, etc. Dose: 0.1-0.15 gm.

**Dihydroresorcin**.—Antiseptic.

**Diiodocarbazol**.—Antiseptic.

**Dithiochlorosalicylic Acid**.—Substitute for iodoform.

**Enterol**.—Liquid intestinal antiseptic. Dose: 0.005-0.015 gm.

**Eudoxin**.—Bismuth salt of nosophen (tetraiodophenolphthalein), containing

52.9 per cent. of iodine.—Intestinal antiseptic. Dose 0.8-0.5 gm.

Fellitin.—"Natural" medicinal soap, prepared from bile.—Chilblain remedy.

Ferratin.—Organic iron compound, closely resembling iron as found in the human system.

Fer Cremol.—Iron Compound obtained from blood by the action of a "dilute neutral iron solution" containing 8 per cent. Fe.—Hematinic. Dose : 0.2-0.5 gm

Ferrohemol.—Ferrated hemol.—Hematinic. Dose : 0.5 gm.

Ferropyrine.—Ferripyrrine; compound of three molecules antipyrine and one molecule ferric chloride.—Chalybeate, analgesic, and astringent. Dose: 0.5 1 gm.

Ferrosine.—Composition consisting of ferric oxide (70-75 per cent.), lime and albumen (10-20 per cent.), water, etc. (10-15 per cent.).—Paint for iron, as a color, polishing material, etc.

Fluorol.—Synonym of sodium fluoride. Gallicin.—Methylic ether of gallic acid.—Topical antiscarrhal.

Glucin.—"Sodium amidotriacinsulphonate." Sweetener, 100 times as sweet as sugar.

Gualacol Phosphate.—Antitubercular. Gualacol Succinate.—Antitubercular.

Gynocyanauridizarin.—From *Gynocardia lancifoliata* and gold.—Antitubercular. Dose : 0.08-0.2 mg.

Hæmostaticum.—Extract thymus gland with 7 per cent. calcium chloride, rendered alkaline with soda solution.

Hæmatin-Albumen.—Dried albumen from ox blood.—Hematinic. Dose : 1 or 2 teaspoonfuls.

Hexamethylenetetramine.—See Urotropin.

Hypnoacetin.—Acetophenonacetylpara-amidophenol.—Hypnotic and antirheumatic.

Iodogenin.—Mixture of powdered charcoal and potassium iodate, or some other oxygen compound of iodine molded into cones or pastilles.—Fumigant and disinfectant (for ignition).

Iodochemol.—Iodized hemol.

Iron Glycerinophosphate.—Nervine. Dose : 0.15 0.3 gm.

Iodoiodoformin.—Compound of iodine and iodoformin.—Succedaneum for iodoform.

Iodsuccinimide.—Succedaneum for iodoform.

Iron-Casein.—Compound of iron with casein.—Hematinic and nutritive.

Lactyltropine.—From action of lactic acid on tropeine.—Cardiac tonic.

Laifan.—Crude, watery borneol, probably identical with Ngai camphor, and obtained from *Bhumea balsanifera*.—Topical anodyne.

Lanolin.—Wool fat.—Ointment base. Lanichol.—Purified wool-fat.—Ointment base.

Lignosulfite.—Side-product in the manufacture of cellulose.—Inhalation antitubercular.

Magnesium Sulphocarbolate.—Laxative and intestinal antiseptic. Dose : 1-2 gm.

Marrol.—Dietetic preparation said to consist of ox marrow, malt extract, and hop extract.

Medulladen.—Extract of spinal cord, used against gout.

Mercuriodiohemol.—Mercurioiodized hemol.—Antisymphilitic. Dose : 0.2-0.5 gm.

Mercury Oxycyanide.—Surgical antiseptic.

Methylpyridine Sulphocyanate.—Antiseptic.

Mydrine.—Combination of ephedrine and homatropine.—Mydriatic.

Myronin.—Mixture of soap, carnauba wax, and chenoceti oil.—Ointment base.

Neurosin.—Generic name of a number of French preparations containing calcium glycerinophosphate.

Noitol.—Proprietary eczema remedy.

Nosophen.—Tetraiodophenolphthalein.—Surgical antiseptic, like iodoform.

Oil Ledum Palustris.—External antirheumatic and alterative.

Oxysparteine.—From sparteine by slight oxidation. Cardiac tonic. Dose : 0.02-0.04 gm.

Paracetamidophenol Ethylcarbonate.—Antipyretic and analgesic. Dose: 0.5-1 gm.

Parachlorsalol.—Parachlorphenol salicylate.—Intestinal antiseptic, like salol. Dose : 2-4 gm. per day.

Phanerogen.—Photographic developer.

Phenosuccin.—Obtained by the action of succinic acid on para-amidophenol.—Analgesic and antipyretic.

Phosphergot.—Generic name given to a mixture of sodium phosphate and ergot, occurring in three modifications.—Tonic. Dose : 0.5-1 gm.

Piperovatine.—Alkaloid from *Piper ovatum*.—Spastic.

Pixol.—"Spirit of Liquid Tar."—Proprietary remedy against influenza.

Potassium Glycerinophosphate.—Nervine. Dose : 0.2-0.3 gm.

Potassium and Aluminum Salicylate.—Astringent antiseptic.

Propylamine, Anhydrous.—Anticholeric. Dose : 2 5 gm. per day.

Prostaden.—Extract of prostate gland used in enlarged prostate.

Quinosol.—Quinoline compound, said to possess bactericidal powers.

Rhinalgin.—Mixture of alumnol, methyl, valerian oil, and cacao butter in suppository form.—Coryza remedy.

Rubrol.—Solution boric acid, thymol, and some "coal tar derivative."—Injection in gonorrhea.

Salazol.—Synonym of salipyrrine.

Saligenin.—Ortho-oxybenzylic Alcohol; salicylous alcohol.—Antirheumatic. Dose : 0.5-1 gm.

Salipyrzolin.—Synonym of salipyrrine. Salithymol.—Thymol salicylate.—Antiseptic.

Septentrionaline.—Alkaloid from *Aconitum septentrionale*.—Sensory paralyzant and antitetic.

Silver Fluoride.—AgFl.—Antiseptic and caustic.

Sodium Cinnamate.—Topical antitubercular.

Sodium Glycerinophosphate.—Nervine. Dose : 0.2-0.3 gm.

Sodium Phenosuccinate.—Sodium salt of anthoxyphenylsuccinamic acid.—Analgesic and antipyretic.

Stypticin.—Hæmostatic. Dose : 0.08-0.2 gm.

Tetania.—Tetanotoxin, ptomaines isolated from tetanus cases.

Thiotone.—Solution ammonium sulphide, used for toning silver chloride gelatin prints.

Thyraden.—Concentrated extract of thyroid gland, used against goiter, myxedema, etc.

Thyroantitoxin.—Crystalline substance from thyroid extract after removal of the albuminoids.

Traumatol.—Iodocresol.—Surgical antiseptic.

Tribromsalol.—Intestinal antiseptic, like salol.

Triphenin.—Antipyretic and antineuralgic. Dose : Antipyr., 0.8 0.6 gm. (4½ 9 grn.); antineur., 1 gm. (15 grn.).

Urotropin.—Hexamethylenetetramine.—Uric acid solvent. Dose : 0.5-2 gm. per day.

Zinc Subgallate.—Astringent and antihidrotic. Dose : 0.05-0.25 gm.

Zincohemol.—Zincated hemol.—Anticholeric and antidiarrheic. Dose : 0.5 gm.

### Camphor Leaf Oil.\*

BY DAVID HOOPER, F.C.S.

The recent high price of camphor, on account of the war between China and Japan and trade monopolies, has caused some anxiety in countries where it is largely consumed, and China and Japan being at present the only two countries where camphor is produced on a large scale, it has been thought desirable that its cultivation should be taken up in other lands. In Japan the camphor trees grow at high elevations away from the sea, and only large trees of about 100 years old are selected for use in making the camphor. From the export returns of this country, it seems that the supply is gradually becoming exhausted. In the island of Formosa the camphor trees are said to be by no means plentiful, and they grow only in certain favorable situations, as far as the climate is concerned, with savage tribes in the immediate vicinity. Here the trees are not considered worth taking until they are 50 years old, and the wood only of the roots and stems is subjected to distillation.

The camphor tree grows very well in India. The Calcutta Botanic Gardens possess a fine avenue of trees, which were introduced in 1802. It grows well in the Ootacamund Botanical Gardens and in other parts of the Nilgiris. It has been planted, as an experimental measure, at Jhansi in the Northwestern Provinces, and in other districts in the plains. Camphor has been known and used in India for many centuries. In A.D. 642, Indian princes sent camphor as a tribute or offering to the Chinese emperors. At one time the tree flourished in Nepal and Tipperah, a large tract of land lying between Bengal and the Upper Irrawaddy. Within the present century camphor was imported from Chittagong, but it has been said that the discovery of the hill-men of distilling it from the root led to the extinction of the trees.

In Ceylon the camphor tree grows well at elevations of 5,000 feet and less; it has the habit of a willow in the island, and it has been suggested that, like a willow, the trees should be coppiced, and the leaves and branches used for preparing the oil. The tree grows for ornamental purposes in Naples and other parts of Italy. Professor Maisch in 1891 reported on the cultivation of camphor in Florida, where it flourished in almost any soil. The solid oil was made from the leaves and branches: the yield was 4 per cent., and the product was more like that of Japan, as it had an odor of saffrol. California has lately become the scene of an industry which has for its objects the planting of the laurel camphor and the preparation of the oil for the American market. The tree has also become naturalized in Java, Brazil, Jamaica and other isles of the West Indies, Mauritius and Madeira.

It is very evident that the camphor tree is able to grow very luxuriantly and extensively in the warmer temperate and tropical parts of the world, far removed from China and Japan, but the slow growth of the tree would prevent all but large capitalists from opening up plant-



ations and waiting for the plants to sufficiently mature. If it is true that in the island of Formosa the wood only of the larger trees is used, and the leaves and branches rejected, then there can hardly be a scarcity of the trees, or the manufacture must be conducted in a very reckless and extravagant manner. The camphor from the dryobalanops tree is said to be quite liquid if a young tree is tapped, and solid if the tree is old. Under such circumstances it would seem that the liquid oil constituted the first stage in the development of the solid substance. It is stated in some text-books on materia medica that the stearopten exists in every part of the plant, including the leaves. On the other hand, it is remarkable that the leaves are not used in China and Japan; perhaps the natives have found that the leaves only give a liquid product which cannot be profitably turned into camphor. As there is no definite information on this point to be found in any description of the industry, I thought it would be interesting to try the effect of distilling the leaves. Another reason that encouraged me to make some experiments in this direction was the hearty manner in which some energetic planters of Ceylon have taken up the camphor question.

A large number of experiments have been made, and a great deal has been written, with regard to camphor oil, the bye-product obtained in refining crude camphor before it is formed into blocks. This has been proved to be a very variable liquid with a specific gravity ranging from 0.88 to 1.00, an erratic optical rotation, although usually to the right, and containing camphor in suspension, or in solution, or none at all.

The first sample of leaves came from an umbrageous tree growing in the Government Gardens at Ootacamund. Fifty pounds of the leaves in a fresh state were distilled in a large copper still with sufficient water for six hours. Eight fluid ounces of oil were separated from the distillate, giving the yield of essential oil 1 per cent. The oil had a slightly yellow color, a specific gravity at 15 degrees C. of 0.9823, and a rotation of + 9.4 degrees in a 2 dm. tube. It gave off a small quantity of liquid at 160 degrees, and began to boil regularly at 175 degrees.

Collected below 180 degrees	= 20.6
185 degrees	= 3.0
190 degrees	= 15.5
195 degrees	= 10.6
200 degrees	= 5.6
205 degrees	= 3.3
Residue	= 8.6
	96.2

The loss here was occasioned by some of the camphor congealing in the condenser; the amount, however, in this sample could only be about 10 or 15 per cent. The residue in the retort was quite solid in the cold, and had a yellowish color and strong camphoraceous odor.

The second sample was obtained from some younger trees grown at Naduvattam on the Nilgiris, a district more than 1,000 feet lower than Ootacamund. The leaves were distilled in the same manner as in the previous experiment, but a large quantity of camphor condensed during the process and almost choked up the worm of the still. About 4 ounces of liquid were collected, having a mass of crystalline matter suspended in it. The oil was strained through cloth, and the solid matter, pressed hard to remove all the liquid portion, was left as a cake of

camphor, weighing 2 ounces. The clear oil had a specific gravity of 0.9814 at 15 degrees C., and twisted a ray of polarized light + 54 degrees in a 2 dm. tube. It began to boil regularly at 165 degrees.

Collected below 185 degrees	= 13.3
190 degrees	= 20.0
195 degrees	= 15.5
200 degrees	= 20.0
Residue	= 25.0
	88.9

The loss was again accounted for by some of the camphor condensing in the cool tube. About one-half of this oil consisted of solid camphor, or, calculating the camphor already separated, the oil from the Naduvattam leaves contained 75 per cent., which is a very satisfactory result. The camphor dissolved in rectified spirit, twisted a ray of light + 30 degrees. The altitude of the Government Gardens in Ootacamund is 7,800 feet, and it is possible that this elevation influences the formation of the solid stearopten in the leaves. At any rate, it is interesting to know that a large proportion of camphor can be obtained from the oil of the leaves and from the leaves themselves, and probably, if taken from trees grown at a much lower elevation, a much larger proportion of this useful substance could be collected.

### Objections to the Cell Theory.

Adam Sedgwick some time ago published a paper in the *Quarterly Journal of Microscopical Science*, in which he called attention to the apparent inadequacy of the cell theory, and recent criticism of his position in the matter has induced him to state it more fully in the same publication. He holds with Sachs and others that the phenomenon of cell formation is not of primary significance, but "merely one of the numerous expressions of the formative forces which reside in all matter." The cell theory asserts that the Metazoa are aggregations or colonies of individuals called cells, and derived from a single primitive individual—the ovum—by successive cell divisions; that the meaning of this mode of origin is given by the evolution theory and that the development of the higher animals is a recapitulation of the development of the race. Mr. Sedgwick's work, however, has led him to doubt the validity of this view of the Metazoon body, and he is inclined to attribute a number of errors in descriptions of embryonic processes to the dominating influence of the cell theory in its modern form. A theory which leads to obvious errors must, he thinks, be wrong, but he has not yet arrived at conclusions which enable him to formulate any satisfactory alternative hypothesis with regard to the meaning of the predominance of the structure called cellular.

In reference to this matter it is pointed out in *Natural Science* that, in the older botanical text books, the plant unit is the "cell"—a cellulose chamber inclosing protoplasm and cell sap—an aggregation of such cells forming a tissue. According to modern ideas, however, the unit is a mass of protoplasm in which is embedded a nucleus. This unit or "mergid" is the starting point of every plant. It may grow and divide repeatedly without the separation of the resulting daughter units by partition walls, a large number of nuclei being imbedded in a general mass of protoplasm contained within a common membrane, as in *Vaucleria* and *Mucor*. In *Cladophora*, again,

incomplete septation is illustrated, and where the completely septate form prevails, the protoplasmic units, though separated, are probably not isolated by the cell walls. The cell has come to be regarded, then, as a mere inclosure of the protoplasm, necessitated by increase in size, differentiation and need for support. Modern attention is being more and more concentrated upon the nucleus. Thus, whereas Weismann originally spoke of "germ cells," he now speaks of "germ plasma," meaning by that nuclear matter; and the continuation of the germ plasma means for him the continuity of nuclear matter, rather than the existence of a chain of cell division, of which the successive generations are pendants. Indeed, recent work generally seems to support Mr. Sedgwick "in attaching little importance to the frequent division of protoplasm into areas round nuclei, but increasing importance to the presence in so-called multi-cellular organisms of localized foci which multiply by division."

### The Practical Use of Ozone.

When electric sparks are passed through the air a peculiar odor is soon noticed. This odor arises from the presence of ozone, which is produced from the oxygen of the air when the latter is subjected to the action of electricity.

Ozone is one of the most powerful oxidizing agents known, and, although no method for producing has been discovered which is as practical as we would like to have it, ozone has still achieved some practical successes. It has been used in the artificial aging of brandy, sweet and heavy wines and liquors. It improves the aroma of coffee and renders uninjurious the disagreeable odors of the coffee beans. It improves tobacco. One of the most interesting and recent uses of ozone (*Brooklyn Manufacturer*) is to improve the resonance of wood, and to artificially age wood. The wood is placed from 12 to 24 hours in a closed and warmed room into which ozonized air is conducted. In this way the wood is hardened and becomes resistant to exposure, and also more resonant. The operation of thickening linseed oil in the manufacture of linoleum, which is a process usually requiring several months, can be finished in a few days by the use of ozone. In bleaching linen ozone is very effective and requires only one-third as much time as the grass bleach, which is, of course, dependent on the weather and the time of year. One of the recent technical uses of ozone is in the production of pure derivatives of starch, as, for instance, soluble starch, dextrine and "crystal gum," the ozone assisting in the removal of all substances which give a dark color, an odor and disagreeable taste. In cheap production ozone offers an attractive problem to electricians.

### A Beaker With Condensing Hood.

A German firm has placed on the market a beaker fitted with a condensing hood, as illustrated herewith, which will prove of value, particularly in quantitative work, as the ground glass hood can be removed on the completion of the distillation, and the residue weighed in the beaker itself. We reproduce the illustration from a recent issue of the *Pharmaceutische Zeitung*.



### Use of Cocaine on the Race Track.

Within a recent period, says a writer in the *Quarterly Journal of Inebriety*, cocaine has come into use on the race track as a stimulant. Horses that are worn and exhausted, or are uncertain as to speed and endurance, are given 10 to 15 grains of cocaine by the needle under the skin at the time of starting, or a few moments before.

The effects are very prominent, and a veritable muscular delirium follows, in which the horse displays unusual speed, and often unexpectedly wins the race. This agitation continues, and the driver has difficulty in "slowing down" the horse after the race is over; not infrequently the horse will go half round again before he can be stopped. The exhaustion which follows is not marked, except in the great thirst and loss of appetite. Sometimes diarrhoea and trembling follow. But good grooms give unusual attention to rubbing and bathing the legs in hot water and stimulants. The general effect on the horse is depression, from which he soon recovers, but it is found essential to give cocaine again to make sure of his speed. The action of cocaine grows more transient as the use increases, and when a long period of scoring follows before the race begins, drivers give a second dose secretly while in the saddle. Sometimes the horse becomes delirious and unmanageable, and leaves the track in a wild frenzy, often killing the driver, or he drops dead on the track from the cocaine, although the cause is unknown to any but the owner and driver. Some horses have been given as high as 20 grains at a time, but this is dangerous and only given to worn out animals, who may by this means win a race. It appears that cocaine is only used in running races, and as a temporary stimulant for the time. It is claimed that the flashing eyes and trembling excitement of the horse is strong evidence of the use of cocaine.

### How Camphor Is Cultivated in Formosa.

One of the principal products of the territory which has come under Japanese administration as a result of the war with China is camphor. In the *Scottish Geographical Magazine* Mr. John Dodd, writing on Formosa, tells us how this product is cultivated.

"Small shanties are scattered over the hills where the camphor trees grow, and in all directions the clearing of the woods is going on at a rapid rate. Some trees are cut up for camphor making, others are sawn into planks and knees for the building of junks and boats of all descriptions. On the hillsides are built distilleries consisting of oblong shaped structures, principally of mud bricks, and about 10 or 12 feet long, 6 feet broad and 4 high. On each side are five to ten fire holes about a foot apart and the same distance above the ground. On each fire hole is placed an earthen pot full of water, and above it a cylindrical tube, about a foot in diameter and 2 feet high, passes up through the structure and appears above it. The tube is capped by a large inverted jar, with a packing of damp hemp between the jar and cylinder to prevent the escape of steam. The cylinder is filled with chips of wood about the size of the little finger, which rest on a perforated lid covering the jar of water, so that when the steam rises it passes up

to the inverted jar, or condenser, absorbing certain resinous matter from the wood on its way. While distillation is going on an essential oil is produced and is found mixed with the water on the inside of the jar. When the jar is removed the beady drops solidify, crystallization commences, and camphor in a crude form, looking like newly formed snow, is detached by the hand, placed in baskets lined with plantain leaves, and hurried off to the nearest border town for sale.

"With regard to camphor, as in other commercial matters, the Chinese Government has acted very foolishly. For over 80 years, to my knowledge, there has been a constant demand for camphor, and yet the administration has done nothing to prevent the reckless waste of the forests and taken no steps to provide for the reforestation of uninhabited tracts unless for cultivation. True, as far as I have explored the mountains of the interior, camphor trees seem to be exceedingly numerous, and there is at present no fear that the supply will run short for many years to come. But the increased demand for camphor in these days of smokeless powder may hasten the destruction of the trees, and therefore it is to be hoped that the Japanese will assure the supply in the future by planting saplings on waste lands. I planted a lot in my garden in 1889, and when I left in 1890 there were trees 80 to 40 feet high and upward. From this experiment I conclude that trees 50 years old would be large enough for all ordinary purposes to which the timber is applied."

### The India Rubber Industry in South America.

The world's consumption of india rubber has been growing so enormously during the past few years that the time does not seem to be far distant when the demand will exceed the supply. Already the difficulty of getting a sufficient quantity of rubber to meet current needs has led consumers to fear that there will be an early famine. One of the chief causes of this heavy increase in consumption is, of course, the employment of the material in the bicycle trade, and long before the limit has been reached in this direction another scope, that may be quite as wide and general, is being opened up in the use of pneumatic tires upon vehicles of all descriptions. The United States is the largest consumer of india rubber at the present moment, says the *London Board of Trade Journal*, but that country is run pretty close by Great Britain. The other markets follow a long way behind, but the amount imported by France and Germany is a no mean proportion of the trade done in this material.

It is certain that the threatened famine in india rubber, or, more properly speaking, caoutchouc, would not be so imminent as it is now if the owners of the plantations in West Africa and elsewhere had been a little less reckless in their method of tapping the trees. In order to more easily get at the milky juice it has long been the custom in West Africa and in some of the South American States to cut down the trees bodily, so that the collectors only secured one lot of caoutchouc from each tree instead of a large number of periodical yields. The prevalent idea that this policy was justified by the almost unlimited range of forests producing caoutchouc was very soon found to be groundless, and, now

that it is too late to have any immediate effect upon the supply, stringent regulations have been made in many countries to prevent the cutting down of trees, and owners are going to a great deal of expense in laying out new plantations, which must, however, take several years before they come to maturity. In the meantime, efforts are being made to compensate for these limited supplies by producing artificial india rubber, and several new processes have lately been brought out in France and Germany though without as yet producing india rubber of a suitable quality upon a commercial scale.

#### NEW SOURCES OF RUBBER.

The most obvious way of meeting the demand for this material is to give more attention to some of the other rubber producing trees that are to be found in considerable quantities in South America and elsewhere. At the present moment French capitalists are trying to make profit out of the scarcity of india rubber by utilizing the balata, which for many years past has been employed upon a small scale for a variety of purposes. There are at least two descriptions of balata, the one white and the other red, the latter being known in the English colonies as the "bullet tree," a corruption, no doubt, of the native word "bolletrie." The species being exploited in French Guiana is the *Mimusops balata*, a magnificent tree which is peculiar to all the Guianas. It attains a height of from 90 to 100 feet. The wood is very much sought after for cabinet making on account of its beautiful color, while it has also the property of resisting the depredations of insects. These merits are almost fatal to the existence of the tree as a rubber producer, and in some of the South American States forests are being cut down without any regard to the profit that can be secured by tapping them in an intelligent manner. In Venezuela the tree is also to be found in great abundance, and, in point of fact, it grows very freely in the mountainous districts of the northern States of South America.

#### BALATA IN BRITISH GUIANA.

Nevertheless, in British Guiana immense forests are found in the low lying districts of swampy Canje. In a report on the balatas, published a little while ago by M. Hayes, a colonizing agent, it was said that there was a sufficient expanse of forest in the Guianas to allow of the exploitation of rubber being carried on for centuries. It was, however, necessary that something should be done to prevent the wholesale destruction of the *Mimusops balata*, which would very soon disappear if allowed to be cut down indiscriminately for its wood, and one of the richest and most prolific resources of South America would thus be destroyed. In fact, both in Venezuela and in Dutch Guiana the trees are cut down with a view of collecting as much of the juice as possible, and in French Guiana the same process was for a long time employed. When the trees are thus felled circular cuts are made every 12 inches, and receptacles are placed underneath to catch the juice. The bark is also sometimes removed from the tree and the juice extracted from it by presses.

In British Guiana it is only allowed to tap the trees without felling them, and a similar restriction is now imposed in the neighboring French colony. The English method of collecting the rubber is to make horizontal incisions half way round

the tree and connect them with a vertical channel to allow of the fluid flowing down into the receptacle, but a better method is said to consist in cutting out rectangular pieces of bark, from which the juice is extracted by presses. Alternate rectangles must, of course, be left on the trunk, and these can be removed at the next tapping when the exposed parts of the tree are sufficiently healed. To secure perfect vitality in the tree it is preferable to only tap it over a third of its circumference every five years. If properly carried out, the collection of balata rubber is a very profitable industry indeed. One traveler in French Guiana, who was accompanied by three men, collected 666 liters of juice in 119 days, which produced, on coagulation, 860 kg. of rubber. Had the men been able to give their time exclusively to the collection of rubber there is no doubt that the amount would have been doubled or trebled.

#### YIELD OF BALATA RUBBER TREES.

It is, indeed, estimated that a single balata will supply a kilogram of rubber every year without suffering to any appreciable extent from the tapping. The system usually employed for securing coagulation is to pour the liquid into large shallow pans about 4 inches deep. A hard crust very soon forms at the surface, and this is removed to allow of another crust forming, and so on until the whole of the juice is solidified. The crusts are then hung on lines to dry. The balata rubber, though, perhaps, slightly inferior to caoutchouc for certain purposes, and notably as an insulating medium, is yet specially adapted for a great many uses, such as machinery belting, mackintoshes, surgical appliances, etc., and its merits are so far recognized that a considerable trade has grown up during the past two or three years in the Guianas. While the exports of balata rubber from British Guiana in 1881 were only 41,000 pounds, in 1889 they were no less than 368,480 pounds, and though the total fell in 1892-1893 to 287,450 pounds, the value has been rapidly increasing, and for the two years named was £20,605. In Dutch Guiana the industry has not been carried on in such a systematic manner. Nevertheless, two American companies are exploiting the balata on a large scale, and are sending the product to the United States. That the industry can be made a very profitable one is seen in the price paid for the rubber, which varies, in Paris, from 8 francs to 8 francs a kilogram according to the quality. It is evident, therefore, that while industrial enterprise is under a cloud in South America it may be to the interests of capitalists to turn these balata resources to account, the more so as rubber is one of those rare things that are not likely to suffer depreciation to such an extent as to make its production unremunerative.

#### The Spruce Gum Industry.

Some interesting information concerning the spruce gum industry is contained in an interview with the head of the firm of Curtis & Son, Portland, Maine, which appeared in a recent issue of the *New York Sun*.

Mr. Curtis is well known in the drug trade, and he has advertised his Yankee Brand Pure Spruce Gum in the *AMERICAN DRUGGIST* for many years past. He is one of the wealthiest men in Portland, Maine, and possesses lands, herds and steamboat lines, and has made nearly all

his fortune in spruce gum. "The people of New York," he said a few days ago, "are not spruce gum chewers, and for that reason they do not realize what an enterprise the getting and marketing of this gum has become, yet many hundred tons of spruce gum are consumed in the United States every year."

#### EARLY BEGINNINGS.

Mr. Curtis probably knows more in regard to the spruce gum history and growth than any other one man, for he was the pioneer in the enterprise. "I prepared and sold the first bit of spruce gum ever put upon the market in this country," he said. "That was in 1850. I am no longer a young man, you see, for I am now 66 years old. Yet," he added, laughing, "I take a still youthful interest in spruce gum. I began first way back in 1850, by going about the country with a cart and peddling the gum from house to house. In this way I went all through New England, and the first year I collected \$6,000 in money. Then I grew ambitious and wanted to make the whole United States my field. It's just as good an ambition, that of subduing a nation to good, healthy spruce gum chewing, as subduing it to tobacco smoking. Well, I have personally visited almost every city in the United States and Mexico in the interests of this business. My first large order, I remember, came from a St. Louis firm. I sold them 86,000 boxes, varying from 1 to 2 pounds in each box, and delivered them all during the year. Now we have agents out all over the country. One of our men is to-day in Butte, Mon.; another out on the Pacific coast. Of course we have scores of competitors, but there is business enough to warrant many more."

#### WHERE SPRUCE GUM SELLS.

When asked where the market for this gum was found, Mr. Curtis went to a large map of the United States which hung on the wall of his private office, and drew his finger across it from east to west, starting with New York City as the southern point. "We sell almost entirely above this line—through the Northern States and up and down the Pacific slope," he said. "Probably Michigan, according to its population, uses more of the gum than any other State in the Union. Chicago and St. Louis are great spruce gum cities. New York City? No; New Yorkers chew pepsin. Do you know," he added, "this taste for spruce gum seems to be almost an hereditary one. The people living among the spruce forests, as in Maine, New Hampshire, northern New York, and Michigan, love the spruce gum; so also do their descendants. The Southern market is small, and there the taste is an acquired one, like that for olives and celery."

Another firm in Portland has on hand at the present time about 200,000 pounds of spruce gum, which is being made ready for the market. The large wholesale houses buy a certain part of their gum prepared, ready for sending out again, but most of it they get in the rough state, and then put it through a steaming or "manufacturing" process in their own establishments. This so-called "manufactured" gum is pure spruce, but gets its name from the fact that it has been reduced from its original state.

#### THE HARVESTING OF SPRUCE GUM.

At this time of the year, and all through the winter months, the spruce gum industry gives employment to hun-

dreds of men in the forests of Maine, New Hampshire, northern New York and Canada. For many of the farmers it forms an only source of income during the late fall and winter season. An experienced "gummer" makes on the average \$2.50 a day. His outlay is small, and the work is considered particularly healthy. He first equips himself with a coarse meal bag, sewed up at the open end, and with a hole cut out of the center large enough to permit of its being drawn over his head. This large opening is usually bound around and stayed with leather. The bag in this way forms two pouches, one of them falling down in front and the other over the back of the gummer. In one of the pouches he stores away certain needed tools, as hammer, hatchet, large knife, and so forth; in the other such a supply of food as he thinks will be needed. The food consists mostly of canned meats, a box of baked beans, tea and bread. These he warms and prepares over a fire.

#### GUMMERS AND THEIR WAYS.

The gummer's stay in the forest depends of course on his success in finding a ready supply of gum—sometimes it is only one or two days, sometimes two or three weeks. During recent years so many men have gummed over these forests that there are now certain well known spruce camps, made of boughs and extremely rough and primitive, yet they furnish very comfortable quarters for the men at night. It is a tradition among the gummers that no one has ever yet taken cold from lying out in the spruce forests, however exposed his condition or intense the cold. Certain it is that they endure rain, snow and cold with a glowing health that would put the trained athlete to the blush. The old, expert gummer loves his work, and it is a local saying that the men "live eight months in the year in order to gum the other four."

The greatest quantity of gum lies in rifts which run up and down the trunk of the spruce tree. An expert gummer will sight a rifted tree by the slightly oval round of its trunk even before he is near enough to see the rift. Often a tree has to be felled to get at the gum lying in the rift, but if possible the trees are climbed. This rifted gum is usually a little hard and dark, but it is perfectly marketable. The best quality is found near the top, and exudes in small, bubble-like blisters. This is quite plastic and light colored. A tree must be three or four years old before the gum is hard enough for use, and a single tree may yield as much as \$5 worth at one time. The gum is carried out of the forest in the meal bag pouches, which hold from 100 to 150 pounds each.

#### HOW THE GUM IS SORTED.

In most regions the gum is sorted into "first class" and "second class" either in the forests or near them. The first quality brings from 75 cents to \$1 a pound, and the second—the hard, dark gum—from 12 to 50 cents. This second class goes through the steaming process.

#### THE BACKWOODS MANUFACTURING PROCESS

is a separate industry. Hot steam is led from a small boiler over an immense tin pan. A layer of spruce boughs is put above the pan, then a layer of second class gum; then again alternating layers of spruce boughs and gum. The steam melts the hard gum, which filters down

through the boughs into the pan. This melted product runs from the pan through an inclined trough into a large receptacle, where it cools to about the consistency of sorghum, when it is taken out, pulled and stretched in the same way as old-fashioned molasses candy. After the stretching it is rolled on a board or table, and little pieces are snipped off with sharp shears and wrapped in bits of colored paper for the chewing public. The farmers' daughters get 50 cents a day for pulling gum, and regard it as quite an aristocratic as well as remunerative calling.

One little town near the Rangeley Lakes system, a town 6 miles square and with a total population of about 250 souls, sends out from its solitary two-windowed store over 85,000 pounds of this gum each year. The railroad company, when running excursion trains from Lewiston to a point some 6 miles south of the Rangeleys, advertise in immense letters on its posters a stop at this little town. The poster reads: "Thirty minutes' stop at B—, the center of the great spruce gum industry."

### The Australian Drug Clerk.

The Australian chemist, says the *Chemist and Druggist of Australasia*, has the weakness of his countrymen, and, as the boy is father to the man, the patient apprentice may serve as an illustration. In the winter he is patient. He has decided that the busy time is over, that there will be no "biz" doing for the next few months, and that he need not even bother about polishing up the glassware, since the flies have given up working for the season also. He lays himself out, therefore, to prolong any work he may be engaged in by asking questions, more or less relevant, concerning the same. If he is engaged in dusting a bottle, he gazes at its spotless surface and asks, "Where do flies go to in winter?" or, "If flies have their use how is it there is no use for them now?" A stranger would try to snub him, a familiar would know that it would be as easy to snub the prince of interviewers as an Australian youth. "He looks innocent enough," said a magistrate who was asked to commit a boy of ten for insubordination. "Yes," was the reply, "he does now, but you should see him when he's roused."

### ON A CUSTOM OF MANUFACTURERS.

Besides what can be done when the apprentice, to whom the chemist has sworn to impart a full and complete knowledge of his business, pauses in the act of weighing up quinine to ask if it would alter the chemical composition of this drug to pack it in smaller compass? And when (still pausing) he goes on to calculate that thousands of pounds must be wasted annually by the conservative Britisher, who sends out quinine and tannin, and benzoic acid and the like in bottles which could be made to hold six times as much, and thus, inferentially, affirms the common sense of the colonial and the manufacturers' want of it, who would be inclined rather to admire his attention to practical details than to censure his abstraction? Neither, on the other hand, can it be asserted that his remarks are altogether wanting in sense when he grumbles at the slowness of a suppository machine that will only turn out one at a time, or ventures to think that ready-made pills are the most elegant. If, in short, he "works" under protest, and seems to protest too much,

the master is rarely in a position to chide with consistency, for does not he himself feel the winter to be a season of lazy discontent, when the only thing that can be done with energy is to discuss (or cuss) the state of the roads in the country, or "those trams" in town? But when the glorious summer approaches quite another picture is presented, and a very different side of the national character displayed. The people then are not deliberately preparing for hard times, and helping to manufacture them by their preparations. The dust is with us and sore eyes; the drains and fevers; the heat and liver and stomach complaints; the thirst and chills, etc. Every one is liable to be sick, no one can afford to be sick in "the busy season" and every one has money, more or less. The chemist, as a natural consequence, is kept busy early and late, and is able to bear all attendant discomforts with the utmost cheerfulness. And how does the apprentice behave in these days?

### THE APPRENTICE IN FLY TIME.

Let us look in at Mr. Blank's shop in a country town between 10 and 11 a.m. on a January day when the thermometer is at 95 degrees in the shade already and rising rapidly. There are several people in the shop who are anxious to get home before it gets too hot. The apprentice is cleaning mirrors with the rapidity which is requisite when the water dries on the glass almost as soon as applied. A customer remarks that the flies give him a lot of work. "Yes," he assents without pausing, "they do. They cause blight, poison wounds, spread disease germs, sell fly papers and insect powders; don't know what we should do without them." It was not exactly what the customer meant, but he has no time to explain before the duster is laid aside and the youth sets to work on a batch of pills. "Will these do, Mr. Blank?" he says in a few minutes (he never says "sir," by the way, except to his inferiors). The pills are "passed," and he lends a hand at the counter, serves three or four customers, gets off "our own" on them with the skill and assurance of a veteran, and then is asked for "some violent powder for baby what's shaved under the arms." He is young enough to laugh at this, and Mr. B. tells him sternly to finish off some powders, while he inquires what quality of violent powder she wants, with a diplomatic emphasis on the N which not only puts an end to the "lady's" resentment, but seals her as his customer for life.

### MAKING SUPPOSITORIES IN HOT WEATHER.

The mail comes in and Mr. B. learns that a drug he had ordered is out of stock. The apprentice suggests that he should run down to "the opposition" for some before they know about the scarcity. He does so, gets half of what they have, and returns perspiring and chuckling, to find a new difficulty arisen. "There is no ice to be got in town," says Mr. B., "and how on earth does that idiot expect we are going to make up these suppositories with the thermometer about 150 degrees in the shade?" (We mentioned that it was rising.) Some shavings of theobroma on the scales, melting gradually, give point to the query. "I can do them outside," the apprentice says, and thinking he means the cellar, Mr. B. weighs up the ingredients, hands them over to his aide, and attends to other work. In a little while our friend turns up smiling with six perfect cones and—wet hair. "Great Galen!" exclaims the master,

"did you make them under the shower?" "I did," replies the ingenious one, "and I don't think it's a bad idea, you see you cool yourself and the stuff at the same time." There is no gainsaying this, and as the hour is about up we will leave our subject, cheerfully looking forward to ten hours more of work, which could not be properly accomplished if the energy and resource both of himself and his master were not practically inexhaustible.

It is no exaggeration to say of the class of natives of which Mr. B. and his apprentice are the type, that there are few things they will do if they see no necessity for doing them, and few things they will not do (and do well) when the necessity arises. Like the steeds of the Arabs they will only walk or gallop, but it may well be that their tendency to walk when opportunity offers provides a reserve force for the galloping, and may enable them to get more enjoyment out of life, and yet to accomplish as much as is done by the constant plodding of the Britisher, or the ceaseless energy of the American.

### That Glass Mortar.

A correspondent of the *London Chemist and Druggist* writes to that journal as follows:

Some little time ago one of my assistants was mixing the following ingredients:

Iodine.....	gr. ij
Pot iod.....	gr. vj
Glycerin.....	3iv

in a glass mortar, which he placed inside another glass mortar containing warm, but not hot, water, when almost immediately a terrific explosion took place, the water flying in all directions, and the report as loud as that of an ordinary gun. I am sending you the particulars, as I think it may be of some interest to the trade. I also send you a small portion of the glass mortar, which was shattered all to pieces. Can you give me an explanation?

Our esteemed contemporary explains the phenomenon in this way: In this case the expansion of the outside of the mortar while the inside remains stationary (owing to the low heat conductivity of glass) determines such a strain that crystallization of the silicate takes place with explosive force. Generally when glass mortars are ruptured the pieces show lines radiating from the inside, the heat of friction or the cold of solution giving internal strain. In the pieces of glass sent to us by Mr. Reeve the lines appear to radiate from the outside.

### An Improvement in Preserving Fruit.

Mr. Petit, chief of the laboratory of horticultural research at the National Horticultural School of Versailles, has made a discovery which will doubtless become of considerable importance to fruit preservers as well as in the household. Mr. Petit noticed that pears and apples kept for several months in an atmosphere saturated with vapors of water and alcohol, even though they were in a state of decay when put in, did not show any signs of mold, while fruit stored under the same conditions, but not exposed to the action of alcoholic vapors, became entirely covered with it. Guided by this observation Mr. Petit placed, on October 31, fresh grapes in a brick receptacle which was cemented inside and closed by a common wooden door, and in



this he placed an open bottle containing about 8 ounces of strong alcohol. On November 20 two grapes on one bunch had turned brown, but they were all firm and free from mold, and did not taste at all sour. The hygrometer showed 98 per cent. of moisture in the air. On December 7 they still appeared fine, although one or two grapes on most of the bunches had turned brown. On December 24 the same results were observed, but on most of the bunches one or two grapes were beginning to decay. At the end of nearly two months each bunch had lost but from one to two grapes each. All the rest were in a state of perfect preservation. The stalks were perfectly green and the grapes had all the qualities of those freshly cut. This method can doubtless be applied practically to preserving fruit for transportation as well as for other purposes.—*The Brooklyn Manufacturer*.

## Bibliography.

**A LABORATORY MANUAL OF ORGANIC CHEMISTRY.** A compendium of laboratory methods for the use of chemists, physicians and pharmacists. By Dr. Lassar-Cohn, Professor of Chemistry in the University of Königsberg. Translated with the author's sanction from the second German edition by Alexander Smith, B.Sc., Ph.D., Assistant Professor of General Chemistry in the University of Chicago. London and New York: Macmillan & Co., 1895. \$2.25.

The original German version of Lassar-Cohn's work has met with pronounced success in the Fatherland, and two editions have been called for within a comparatively short period. An English translation of the work is particularly desirable at the present time in view of the increased requirements for the post-graduate degree, and Dr. Smith has rendered chemistry students a real service in placing this book within their reach.

Perhaps the best method of indicating the scope of the present volume will be to bring a quotation from the author's introduction, selecting that part which best contrasts the scope and character of the book under review with works of a similar character. The translator points out that the work does not take the place of any of the text-books of organic chemistry, but bears toward them the relation of an almost indispensable complement. The author says: "Of recent years several works have appeared in which all the methods for the preparation of certain classes of bodies are collected. But even these confine themselves almost entirely to the statement of the equations representing the chemical actions. By using the numerous references to the literature which they contain, it is easy for the reader who has access to an adequate library to ascertain the exact course which was followed in any particular case. In the present volume, on the other hand, an effort has been made to bring together the methods which may be employed for carrying out all the common operations, such as sublimation, reduction and the preparation of nitro bodies and of sulphonic acids, without reference to the particular substances employed. Care has been taken also to show by means of examples how various investigators have overcome the difficulties of any particular case."

**A MANUAL OF ORGANIC MATERIA MEDICA.** Being a guide to materia medica of the vegetable and animal kingdoms, for the use of students, druggists, pharmacists and phys-

cians. By John M. Maisch, Ph.M., Phar. D., late Professor of Materia Medica and Botany in the Philadelphia College of Pharmacy. Sixth edition. Revised by Henry C. C. Maisch, Ph.G., Ph.D. Illustrated, pp. 25-518. Philadelphia: Lea Brothers & Co. 1895. Cloth, \$2.

We regret that pressure of other matters has prevented an earlier notice of the new edition of "Maisch." The present, sixth edition, has undergone a careful revision, and considerable new matter has been introduced, without, however, adding to the size of the book, condensation having been aimed at. The chief additions and alterations have been necessitated by the publication of the 1890 revision of the U. S. Pharmacopoeia, which called for a number of changes in specific names and in the general scheme of typography throughout the manual. For example, articles that have been made official since the publication of the fifth edition of the work are now printed in large type, while those that are no longer recognized in the pharmacopoeia are put in small type. In addition, the text is further elucidated by excellent engravings from photomicrographs of a number of the official barks, among others, cinnamomum cassia, viburnum, opulus, eunymus, xanthoxylum, etc. Those portions of the work dealing with the histology and chemistry of the drugs studied have also received careful revision, and the results of recent investigations and observations are recorded.

We can add nothing to our previous commendatory notices of this standard text book of materia medica. It is a work of such well tried merit that it stands in no danger of being superseded, but will always remain a splendid monument to the genius and untiring industry of one to whom American pharmacy is under a great debt for many notable contributions to the sum of our knowledge of vegetable drugs.

## Received.

**ESSENTIALS OF VEGETABLE PHARMACOLOGY.** A treatise on structural botany. Designed especially for pharmaceutical and medical students, pharmacists and physicians. By Henry H. Busby, M.D., Professor of Botany, Physiology and Materia Medica in the College of Pharmacy of the city of New York, and Smith Ely Jelliffe, M.D., Professor of Pharmacology in the College of Pharmacy of the city of New York. With 500 illustrations. New York: D. O. Haynes & Co., 1895. \$2.50.

**AN ADDRESS ON THE USE OF DRUGS.** Delivered before the Harlequin Medical Society on October 11, 1895, by W. B. Gowers, M.D., London, F.R.S., Consulting Physician to University College Hospital, Physician to the National Hospital for the Paralyzed and Epileptic, etc.

## Pamphlets, Etc.

**THIRTEENTH ANNUAL REPORT.** Association of Manufacturers and Wholesale Dealers in Proprietary Articles of the United States. Record of Proceedings at Annual Meeting held at Denver, Col., September 8 and 9, 1895. New York: Joseph Leeming, Secretary.

Of the many bound volumes of "Proceedings" which reach our desk during the course of a year, few are gotten up with so much artistic care and effect as the volume before us. The cover is a particularly good example of high art in printing as applied to pamphlets of this kind, and the general typographical scheme is excellent. A cleverly executed process portrait of R. E. Queen graces the opening pages as a frontispiece, and a memorial to the late John Hodge, in the body of the volume, is fittingly embellished with a fine portrait of the deceased. The reading matter of the "Proceedings" is of interest chiefly to members of the association and those

connected with the preparation and sale of patent medicines.

**PROCEEDINGS OF THE NATIONAL WHOLESALE DRUGGISTS' ASSOCIATION,** in convention at Denver, Col., September 2, 3, 4 and 5, 1895. Geo. B. Bower, official stenographer.

The secretary of this association is to be congratulated on the excellent appearance of this volume. Cloth has been substituted for the paper covers formerly used, and the title and date of meeting are neatly set forth in gold letters. A handsome photogravure of the president, J. C. Eliel, is printed as a frontispiece to the volume and a half-tone portrait of the departed treasurer, S. M. Strong, appears on page 352.

**PROCEEDINGS OF THE FOURTEENTH ANNUAL MEETING OF THE VIRGINIA PHARMACEUTICAL ASSOCIATION,** held at Blue Ridge Springs, Va., July 17, 18 and 19, Lynchburg, 1895.

The report of the secretary of this active association shows a total membership of 219. Several interesting papers were read at the last meeting, and these are printed as an appendix to the volume.

**PROCEEDINGS OF THE NEW HAMPSHIRE PHARMACEUTICAL ASSOCIATION,** at the twenty-second annual meeting, held at Laconia, September 3 and 4, 1895. Also the report of the Commissioners of Pharmacy.

The "Proceedings" of this association seldom exceeds more than 82 pages, much of the matter being condensed. There are now over 100 members in the association, and the report of the treasurer, as submitted at the annual meeting, showed a balance of cash on hand of \$726. That the association as a body does not view with approval the intention of the American Pharmaceutical Association to meet in Canada next year is shown in the following resolution, adopted by the Committee on President's Address, composed of W. B. Mitchell, Edward H. Currier and Geo. F. Underhill. The resolution reads:

"We regret exceedingly that the United States are not of sufficient magnitude for the American Pharmaceutical Association to hold its annual meetings in."

The only paper of a technical value incorporated with the "Proceedings" is one in answer to a query regarding the quality of the sweet spirit of nitre prepared from the concentrated liquor. Geo. F. Underhill of Concord is the author of the paper submitted in reply, and he expresses himself as opposed to the use of the concentrated spirit, but his statements are unsupported by experimental data.

**TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA.** Forty-second Annual Meeting, held at Goldsboro, N. C., May 14, 15 and 16, 1895. Wilmington, N. C., 1895.

The mechanical execution of the work is all that could be expected from a firm so favorably known in this respect as Macmillan & Co., and the reference value of the book is enhanced by a very adequate index and an unusually comprehensive table of contents. The illustrations are superior in execution to the engravings usually employed in works of the same character. We are confident the work will take a definite place among standard text-books of chemistry in American schools.

**PROCEEDINGS OF THE EIGHTEENTH ANNUAL MEETING OF THE KENTUCKY PHARMACEUTICAL ASSOCIATION,** held at Mammoth Cave, May 21, 22 and 23, 1895. Louisville, Ky. 1895.

**PROCEEDINGS OF THE WISCONSIN PHARMACEUTICAL ASSOCIATION,** held at Sheboygan, August 13, 14, 15, 1895. Fifteenth annual meeting and the roll of members, together with the thirteenth annual report of the Wisconsin State Board of Pharmacy. Janesville, Wis., 1895.





We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of any unusual compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the labels used on packages of the compound should also be sent.

**Latest Work on Urinary Analysis.**—E. G.—The latest American work is Tyson's "Guide to the Practical Examination of Urine" (P. Blakiston, Son & Co., Philadelphia. \$1.50) This is the ninth edition of a work generally used both as a reference book and a text book of the subject. The newest book is by Purdy, entitled, "Practical Urinalysis and Urinary Diagnosis," second edition (F. A. Davis Co., Philadelphia). Either of the two works named can be obtained at the publication office of this journal.

**Anonymous Communications.**—H. B. is advised that it is our custom to ignore all communications which do not bear the name and address of the writer.

**Vanillin and Vanilla.**—E. H. A. asks us as to the flavoring value of vanillin as compared with vanilla bean.

Assuming that it is the artificial vanillin to which our correspondent has reference, the value of this article as a substitute for the true bean is differently stated by different experimenters. According to Holmes (Proc. Am. Phar. Assoc. xxxv., 529) 1 ounce of vanillin is equal to 1 pound of vanilla bean. Sawyer ("Odorographia" ii., 395) says that for many manufacturing purposes vanillin is superior to vanilla bean and recommends its use in the form of a 2½ per cent. "Vanillin sugar," which, weight for weight, equals in aroma the best vanilla and should be used in precisely the same manner. He gives the following formula for its preparation: Take of vanillin 6 drams 15 grains, dissolve it in 4 fluid ounces of pure odorless absolute alcohol; pour the solution upon 2 pounds 2 ounces of the finest sugar and mix it thoroughly in order to distribute it as equally as possible. After having evaporated the alcohol in a warm place and when the sugar has become thoroughly dry, it should be powdered in an earthenware mortar and sifted. Sawyer's formula for the preparation of vanilla essence from vanillin is as follows: Take of vanillin crystals 6 drams 15 grains, dissolve in 20 fluid ounces of pure, absolute alcohol and add 15 fluid ounces of distilled water. This is said to equal the best vanilla in aroma and is used in exactly the same way. The vanilla essence generally used for soda syrups is prepared by taking for that purpose as much of the 2½ per cent. vanillin essence as would otherwise have been taken of the finest vanilla.

**Bromelin.**—F. E.—The ferment of pineapple was discovered by Professor Chittenden of Yale University. It is a constituent of the juice of the ripe fruit, and the experiments of Professor Chittenden and others go to show that it has a powerful proteolytic action on meat, fibron, white of egg, etc., and possesses the power of curdling milk like rennet. It is most active at 40 degrees C. and in neutral solutions. The presence of acids or alkalis, however, does not materially impair its action. The ferment is precipitated from the juice, along with the proteids, by saturation with ammonium sulphate. The precipitate, freed from excess of salt by dialysis, acts on proteids like the original juice. It is also precipitable by sodium chloride.

**Artificial Human Milk.**—J. C. S.—The following is given as a "kitchen recipe" for the production of artificial human milk:

New milk.....	3 pints
Cream.....	4 ounces
Milk sugar.....	¾ ounces
Water.....	2 pints

Dissolve the milk sugar in the water and mix all together. Put into bottles filled to the shoulder only, place them in a sterilizing apparatus and allow them to remain for the usual time.

**Artificial Carlsbad Salts.**—P. L.—The German Unofficial Formulary gives the following formula for this article:

	Parts.
Sodium sulphate (cryst.).....	5
Sodium carbonate (cryst.).....	2
Sodium chloride.....	1
Hot water.....	12

Dissolve the salts in the hot water, filter the solution, and evaporate it until a film begins to form on the surface; then set it aside to crystallize. Separate the crystals from the mother liquor and transfer them (without washing them with water) to bottles. The mother liquor is to be rejected. See also National Formulary.

**Toothache Gum.**—N. G. L.—The following formulas are suggested for a preparation to be put up as your own:

Paraffine.....	34 grains.
Burgundy pitch.....	800 grains.
Oil cloves.....	Mxxx.
Creosote.....	

Melt the first two ingredients and when nearly cool add the oil of cloves and creosote, stirring well.

An alternative formula is as follows:

	Parts.
White wax.....	30
Venice turpentine.....	12
Mastic, powdered.....	5
Opium, powdered.....	8
Chloral hydrate.....	2½
Mix, according to art.	

A preparation containing pellitory as an active ingredient has been used to some extent. It reads thus:

Pellitory, powdered.....	1 part.
Mastic, powdered.....	1 part.
Sugar, powdered.....	1 part.
Chloroform.....	q. s.

Make this into a paste with sufficient chloroform, and at once put into a stoppered bottle.

## Correspondence.

### A Correction from Professor Remington.

EDITOR AMERICAN DRUGGIST:

SIR—My attention has been called to the statement upon page 8 of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD of January 10. Under the head of "Aromatic Waters and Their Preparation," the following paragraph occurs:

Magnesia was discarded in the Pharmacopoeia of 1890, its place being taken by absorbent cotton, as suggested by Professor Remington.

This statement is an error. You will find upon page 215 of the fifteenth edition of the United States Dispensatory a statement which has been before pharmaceutical readers for 12 years. The suggestion to use absorbent cotton did not originate with me, but with Mr. W. S. Thompson of Washington, and this fact is stated upon the page quoted. Will you kindly make the proper correction. My views upon the subject of medicated waters have been expressed in the chapter on this class of preparations in the Practice of Pharmacy.

JOSEPH P. REMINGTON.  
PHILADELPHIA, PA., January 14.

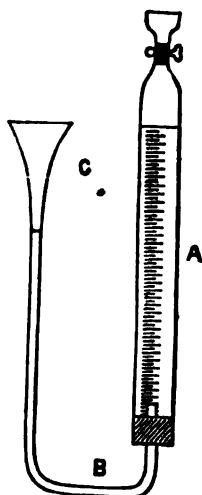
### Assaying Spt. Aether Nitrosi.

EDITOR AMERICAN DRUGGIST:

SIR—Mr. David Walker's proposal to estimate the nitrite value of spirit of nitrous ether by direct titration of a mixture of the spirit, acetic acid and potassium iodide contained in an Erlenmeyer flask with sodium thiosulphate solution,\* is apparently unaware that this method was suggested by Mr. D. B. Dott a dozen years ago, and had to be abandoned on account of the fallacious results, for whenever the nitric oxide liberated by decomposition of the ethyl nitrite comes in contact with the air of the flask N<sub>2</sub>O<sub>4</sub> is formed. This at once decomposes more of the alkaline iodide; indeed, decomposition might go on indefinitely if the supply of air and iodide were large enough. Mr. Dott endeavored to obviate this objection by various means, such as working with an open dish in which CO<sub>2</sub> was simultaneously generated, but with modified success. It was his knowledge of the difficulties of this method which led Mr. A. H. Allen to effect the reaction in an air-free space and estimate the nitric oxide instead of the iodine, the method caught on, and simultaneously indirect estimation through the iodine factor was deservedly forgotten. A man

\* AMERICAN DRUGGIST xxvii, p. 371.

who knows all the worries of the latter process may get fairly accurate results, but the novice or careless worker may return a 8 per cent. ethyl nitrite spirit as containing anything between that and,



MACEWAN'S BURETTE NITROMETER.

[The figure shows an extemporized apparatus made of a burette and funnels which was communicated by Mr. MacEwan to the *Chemists and Druggists' Diary* for 1893. The burette is inverted, A, and a small funnel attached to it by means of a short piece of India rubber tubing; another funnel, C, is similarly attached to the burette, as shown. The volume of the ungraduated part of the burette should be determined and, of course, included in the reading.—Ed.]

say 80 per cent., because he is never sure about the end point.

PETER MACEWAN.

LONDON, ENG., January 7.

### Examination Questions of the California Board of Pharmacy.

At the meeting of the board held on the 8th inst., the following set of questions were asked:

#### Chemistry.

J. H. FLINT, Examiner.

- 1.—State how the following elements may be obtained and give the atomic weight and valence of each, hydrogen, oxygen, iodine, chlorine.
- 2.—How are chemical changes in matter distinguished from physical changes? Describe the difference between a precipitate and a separation in a solution?
- 3.—How can litmus paper be made; if reddened by an acid, how may it be restored? Is litmus of chemical or vegetable origin?
- 4.—From what source is cream of tartar obtained? Give its chemical composition. State what official preparations contain tartaric acid.
- 5.—How may gold be dissolved? What is aqua fortis? What is aqua regia?
- 6.—Give the official name of the following: Caustic potash, salt of tartar, rochelle salt, cream of tartar, tartar emetic, saltpetre.
- 7.—Give the formula of Goulard's extract. What is the difference between sugar of lead and Goulard's extract?
- 8.—How can marble be converted into calcium oxide? What is chalk, give formula?
- 9.—How can sulphate of lime be detected in lac sulphur? How can arsenic be detected in bismuth subnitrate?

10.—What is phenol? What is phenic acid? What is phenylic alcohol?

#### Pharmacy.

J. W. WOOD, Examiner.

Time allowed, two hours.

- 1.—(a) What is the equivalent of 1 kg. in grains; (b) of 16 ccm. in minims; (c) of 1 ounce in grams?
- 2.—What is understood by official; by official? What is the standard of authority in your pharmacy?
- 3.—What is the U. S. P. formula for Eff. Sol. Cit. Magnesia? Why is Bi Carb. Potass used?
- 4.—Why is Alcohol used in some Tinctures and Diluted Alcohol in others? What Tincture contains Spts. Ammon. Aromatic?
- 5.—What is the process for making Denarcotized Opium and what important constituent is removed thereby?
- 6.—What important class of medicinal compounds is prepared from Phosphorus? Name those official. What is Amorphous Phosphorus and how does it differ from ordinary Phosphorus?
- 7.—What menstruum is used in making (a) Tr. Tolu; (b) Tr. Myrrh; (c) Tr. Capsicum; (d) Tinct. Kino?
- 8.—Give details of process for preparing Fowler's Solution and per cent. of Arsenious acid therein. Why is Comp. Spts. of Lavender used?
- 9.—What part of the plant is used in preparing (a) Tr. Arnica; (b) Squills; (c) Strophanthus; (d) Aconite; (e) Nux Vomica?
- 10.—What class does Assafetida belong to? What is its best solvent and why? Name official preparations?

#### Materia Medica.

W. M. SEARBY, Examiner.

- 1.—Capsicum. (a) Botanical name of plant and part used. (b) How can you distinguish the official from other kinds of capsicum? (c) What is its active principle? What are its best solvents? (d) Name the official preparation and dose of each.
- 2.—Triticum. (a) Botanical name of plant and English synonym. (b) What part used and when collected? (c) Its appearance as seen in drug stores? (d) Its medicinal uses and dose of fluid extract?
- 3.—Wormseed. American and Levant. (a) Give Botanical name, part used and place of growth of each. (b) How can you distinguish one from the other? (c) Give active principle of each. (d) Dose of each and of its active constituent.
- 4.—Bees Wax. (a) What is its source? (b) How is white wax obtained? (c) How can you distinguish white wax from spermaceti, Japan wax and paraffine? (d) What is the melting point of wax?
- 5.—Pulsatilla. (a) Botanical name, part used and habitat? (b) How recognized? (c) What are the requirements of the U. S. P. as to its collection and preservation, and why? (d) The medicinal uses and dose?
- 6.—Serpentaria. (a) Part used and how distinguished from other similar drugs? (b) Its chief medicinal constituents? (c) Official preparations. (d) Medicinal properties and dose of fluid extract.
- 7.—Blue Cohosh. (a) Botanical name and part used. (b) Its chief constituents. (c) Its uses and dose of fluid extract?
- 8.—Colocynth. (a) Botanical name, part used and where grown? (b) How large a percentage of its weight consists of seeds? Should these be used in mak-

ing the extract? (c) Name its constituents both active and inert. (d) What is the best menstruum for exhausting it? (e) Dose of the drug and of the simple extract?

9.—What are the sources, uses and doses of the following: (1) Acetanilid? (2) Theobromine? (3) Salol? (4) Salicin? (5) Resorcin? (6) Thymol? (7) Eserine? (8) Apomorphine? (9) Tannin? (10) Beta Naphthol.

10.—Give doses and uses of the following: (1) Tinct. Aconite? (2) Pilocarpine? (3) Fl. Extr. Squills? (4) Fl. Extr. Digitalis? (5) Fl. Extr. Jalap? (6) Sulphate of Sparteine? (7) Fl. Extr. Cactus Grandifolius? (8) Acetum Sanguinaria? (9) Musk? (10) Oil of Sandalwood? (11) Oil of Savin? (12) Vol Oil Mustard? (13) Oil of Sigillum? (14) Naphthol? (15) Lactucarium? (16) Tinct. Rhatany? (17) Kouso? (18) Fl. Extr. Hydrastis? (19) Tinct. Cannabis Indica? (20) Solid Extr. Aconite?

#### Identification.

R. J. VAN VOORHIES, Examiner.

- 1.—Sodium chloride.
- 2.—Ammonia mur gran.
- 3.—Boric acid.
- 4.—Potassium nitrate.
- 5.—Cut liquorice.
- 6.—Sugar of milk.
- 7.—Fennel seed.
- 8.—Sage.
- 9.—Sassafras pith.
- 10.—Wild cherry bark.
- 11.—Quassia.
- 12.—Squills.
- 13.—Cascarilla bark.
- 14.—Canella bark.
- 15.—Elder flowers.
- 16.—Soap liniment.
- 17.—Spirit of nitrous ether.
- 18.—Spirit of chloroform.
- 19.—Syrup of rhubarb.
- 20.—Cream of tartar.

#### Toxicology.

H. J. FINGER, Examiner.

- 1.—Name the most important official preparations, giving their doses of mercury. What is the best antidote and treatment in cases of poisoning by corrosive sublimate?
- 2.—What is tartar emetic, for what is it used in medicine? What is the best antidote and state whether it is a chemical, mechanical or physiological antidote.
- 3.—What are the two official antidotes for arsenical poisoning. How are they prepared and why is one to be preferred to the other?
- 4.—What per cent. of phosphorus is contained in bones? What are the poisonous symptoms in phosphorus poisoning? What the best antidote and treatment? What emetic should always be used and why?
- 5.—What is oxalic acid prepared on a large scale? What is the best antidote for it?
- 6.—What per cent. of opium should good laudanum contain? How much opium in one ounce of paregoric? What are the toxic effects of opium and what should be done to offset them? What counter poison should be given and why?
- 7.—What is a poison? What is a counter poison? What is an antidote? Explain the distinction between a chemical, mechanical, and physiological antidote and give an example of each. In brief, what is the law of California regulating the sale of poisons.
- 8.—How is apomorphine prepared, for what is it used? What is its most im-

mediate effect on the system given in active doses?

9.—What are the toxic effects of atropine and from those symptoms, state what class of remedies should be given to offset them.

10.—For what poison is atropine a counter poison and state fully why.

## Student's Column.

### Organic Materia Medica of the U. S. P.

(Continued from page 20.)

**Staphisagria.** *Staphisagria*; *stavesacre*.  
**BOTANICAL NAME.**...*Delphinium staphisagria*.  
**NATURAL ORDER.**...*Ranunculaceae*.  
**HABITAT.**...Southern Europe, the Levant and Canary Islands.  
**CONSTITUENTS.**...Three alkaloids: Delphinine, delphinidine, delphinaline; fixed oil and traces of volatile oil.  
**PROPERTIES.**...Chiefly used externally for killing vermin. Intern. is diuretic, cathartic and acrid narcotic.  
**PARTS USED.**...The seed.

**Stillingia.** *Stillingia*; Queen's root; Queen's delight; silver root.  
**BOTANICAL NAME.**...*Stillingia sylvatica*.  
**NATURAL ORDER.**...*Euphorbiaceae*.  
**HABITAT.**...Southern United States.  
**CONSTITUENTS.**...Glucoside, silyacrol resin, fixed oil, volatile oil.  
**PROPERTIES.**...Alterative.  
**PARTS USED.**...The root.

**Dose.**—Gm. 1–2; Ext. *ad.*, Co. 2–4.

**Stramonii Folia.** *Stramonium* leaves; thorn apple leaves; Jimson weed.  
**BOTANICAL NAME.**...*Datura Stramonium*.  
**NATURAL ORDER.**...*Solanaceae*.  
**HABITAT.**...Asia; naturalized in United States.  
**CONSTITUENTS.**...Daturine, mixt. of atropin and hyoscyanine.  
**PROPERTIES.**...Anodyne, expectorant, sedative, narcotic, diuretic.  
**PARTS USED.**...The leaves.

**Dose.**—Gm. 0.06–0.13.

**Stramonii Semen.** *Stramonium* seed.  
**BOTANICAL NAME.**...*Datura Stramonium*.  
**NATURAL ORDER.**...*Solanaceae*.  
**HABITAT.**...Asia; naturalized in United States.  
**CONSTITUENTS.**...Fixed oil; alkaloids, daturine and scopoline.  
**PROPERTIES.**...Similar to leaves.  
**PARTS USED.**...The seed.

**Dose.**—Gm. 0.06–0.2; Ext., Gm. 0.016; Ext. *ad.*, Co. 0.06–0.12; Tinct., Co. 1–2.

**Strophanthus.** *Strophanthus*.  
**BOTANICAL NAME.**...*Strophanthus hispidus*.  
**NATURAL ORDER.**...*Apocynaceae*.  
**HABITAT.**...Tropical Africa.  
**CONSTITUENTS.**...Kombic acid and strophanthin, a glucoside.  
**PROPERTIES.**...Heart sedative.  
**PARTS USED.**...The seed.

**Dose.**—Tinct., Co. 0.30–0.60.

**Styrax.** *Styrax*.  
**BOTANICAL NAME.**...*Liquidambar orientalis*.  
**NATURAL ORDER.**...*Hamamelidaceae*.  
**HABITAT.**...Asia Minor.  
**CONSTITUENTS.**...Resins, cinnamic and benzoic acids, toluene.  
**PROPERTIES.**...Expectorant, stimulant, antiseptic, vulnerary.  
**PARTS USED.**...The balsam prepared from the inner bark.

**Dose.**—Gm. 0.5–2.

**Sumbul.** *Sumbul*; musk root.  
**BOTANICAL NAME.**...*Ferula Sumbul*.  
**NATURAL ORDER.**...*Umbelliferae*.  
**HABITAT.**...Central and Northeastern Asia.  
**CONSTITUENTS.**...Volatile oil, resin, angelic acid.  
**PROPERTIES.**...Antispasmodic, stimulant, tonic, nervine.  
**PARTS USED.**...The root.

**Dose.**—Gm. 0.5–2; Tinct., Co. 0.6–2.

(To be continued.)

## Quiz Box.

### Answers to Questions. — Tenth Series.

90.—*Rubus*. Natural order, *Rosaceae*. Habitat, North America. Principal constituent, tannin. Properties, astringent. Part used, the bark of the root.

91.—*Rubus idæus*. Natural order, *Rosaceae*. Habitat, Europe, Northern Asia, cultivated in United States. Constituents, sugar, malic and citric acids, volatile oil. Properties, agreeable flavoring. Part used, the fruit.

92.—*Rumex*. Natural order, *Polygonaceae*. Habitat, Europe and North America. Constituents, chrysophanic acid, etc. Properties, astringent, tonic, laxative. Part used, the root.

93.—*Sabina*. Natural order, *Coniferae*. Habitat, United States, from Maine to Wisconsin and northward. Constituents, tannin, resin, volatile oil. Properties, emmenagogue, anti-rheumatic. Parts used, the tops.

94.—*Salvia*. Natural order, *Labiatae*. Habitat, Southern Europe, cultivated in United States. Constituents, volatile oil. Properties, aromatic stim., tonic astringent. Parts used, the leaves.

95.—*Sambucus*. Natural order, *Caprifoliaceae*. Habitat, North America. Con-

stituents, volatile oil, acrid resin, valeric acid. Properties, aperient and diuretic. Parts used, the flowers.

96.—*Sanguinaria*. Natural order, *Papaveraceae*. Habitat, Canada and the United States. Constituents, alkaloids, sanguinarine, chelerythrine protopine, homochelidonine; resins. Properties, alterative, tonic, expectorant and emetic. Part used, the rhizome.

97.—*Santalum rubrum*. Natural order, *Leguminosae*. Habitat, India. Constituents, coloring principle, santalin, santal, pterocarpin, etc. Properties, used for coloring tinctures. Part used, the wood.

98.—*Santonica*. Natural order, *Compositae*. Habitat, Turkestan. Constituents, volatile oil, neut. princip., santonin, resin, etc. Properties, stimulant, anthelmintic. Parts used, the unexpanded flower heads.

99.—*Sassafras*. Natural order, *Laurineae*. Habitat, United States and Canada. Constituents, volatile oil, tannin, starch. Properties, aromatic demulcent, stimulant. Part used, the bark of the root.

100.—*Sarsaparilla*. Natural order, *Liliaceae*. Habitat, Tropical America, from Mexico to Brazil. Constituents, parillin, active principle, volatile oil, resin, etc. Properties, alterative. Part used, the root.



## Advertising Aid, how, when, and where to Advertise.

PRACTICAL HINTS AND SUGGESTIONS. CRITICISM AND CONSTRUCTION OF ADVERTISEMENTS.

In Charge of Ulysses G. Flanning.

The department editor will be pleased to criticize any advertisements submitted and to suggest improvements. Questions answered and advice given. Our readers are cordially invited to avail themselves of this help.

### TO GET RESULTS.

**I** DOUBT if one druggist in ten sees direct results from his advertising. His business is one in which immediate returns are difficult to get, because such returns usually depend on one thing, viz., prices.

Druggists are apt to be shy in the matter of quoting prices; nor does their stock afford the opportunities to talk prices that other lines do. The public is not posted as to the value or quality of what the druggist sells. With dry goods or groceries it is different. People know what they are worth and a cut price

meets with an immediate response. The public knows what patent medicines are worth, hence the dealer who recognizes the pulling power of prices is often impelled to cut on this portion of his stock. By this he gains a doubtful and at most a temporary advantage. The ultimate result is pretty sure to be a loss. Here is where the druggist is at a disadvantage. He cannot well cut on a single article in the line of patents without being eventually forced to cut on the whole. No other dealer handles a line that presents the same peculiar phase. If the dry goods man sold all woollens by the pound and a cut of 25 per cent. on

socks meant an ultimate reduction of this amount on his entire woolen stock, we would hear of fewer special sales.

Good advertising does not necessarily mean immediate, marked results. The cumulative results are really the important ones. Your trade may be gradually increasing, and you may attribute the gain to your advertising; still, it is comforting, I know, to occasionally have positive evidence that your ads are read and bring results. This is possible without cutting prices on patients. You can get immediate results by advertising specialties and by offering out prices on sundries and miscellaneous articles. This subject deserves further discussion, and I will treat it more at length in the next issue.

### CRITICISM AND COMMENT.

#### CHRISTMAS ADVERTISING.

Some Christmas advertising is commented on in this issue, and some has to be held over until the next. This may have little present interest, but those who handle holiday goods had better note it rather carefully, as some hint may be dropped or suggestion given that will be useful next season.

JOHN P. FREY,  
WHOLESALE AND RETAIL  
DRUGGIST AND MANUFACTURING CHEMIST.  
PHILADELPHIA, December 1, 1896.  
U. G. MANNING, Esq.  
MY DEAR SIR: I have read with a great deal of interest the many copies of advertisements published in the AMERICAN DRUGGIST, and would like to submit the inclosed as a sample of what I had sent out for the holidays in '94. In connection with this circular, the windows were filled with such goods as were mentioned in the circular, as were also the counter tops and show cases. The store was stripped of everything except that which helped to give a holiday appearance. The result was good.

JOHN P. FREY.

The circular sent was a small four-page one, devoted largely to perfumes. The names of their leading perfumes were given, followed by lists of their leading odors or specialties. The circular gives the impression that an unusually large line of perfumes is carried. It could hardly do more than this, and perhaps nothing more was expected of it.

The holiday appearance given the store was a good idea, and doubtless added much to the effectiveness of the advertising. The last sentence of Mr. Frey's circular was doubtless the most widely remembered one. It read: "Beginning Christmas eve, 1,000 bottles of the finest extracts will be given away."

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#### ON BOOKLETS.

GREAT BEND, PA.

MR. U. G. MANNING.  
DEAR SIR: I am greatly interested in your Business Hints, and have employed a great many of them in my advertising. Am a firm believer in all kinds of advertising. Use both our local papers and change frequently. This last Christmas I got out a quantity of booklets, like the one inclosed. About the 10th I made a house to house distribution and mailed them to nearby country post offices. The result was apparent in my holiday trade. A great many people said: "I read your little booklet and thought I would come in and see what you had." I did not let them get away. What do you think of it? Would be glad to have you criticize, and any suggestions you could offer for another year would be gratefully received. Very truly yours,  
F. E. SANDS.

Mr. Sands' booklet is a well gotten up, common sense one, and could hardly fail

to bring good returns. It consists of 12 pages and cover. The cover is tinted and blue ink is used throughout. It is illustrated by two or three cuts, is attractive enough to secure attention and practical enough to hold it when once caught. The scheme of the booklet is to help buyers by grouping, under the various heads, presents suitable for different members of the family. Presents for ladies, presents for gentlemen, for children, miscellaneous, books, etc. Christmas buying is really trying for most people. A booklet of this sort is apt to be of real value to those who are cudgeling their brains, and the aid will be appreciated. The booklet gives prices in a general way, so that customers may not only be

find in these suggestions something that he can use to advantage next season.

\*\*\*

#### GOOD ADVERTISING IN CANADA.

A. E. WALDON & Co.,  
WHOLESALE AND RETAIL DRUGGISTS.  
CALGARY, ALBERTA, N. W. TERRITORY.  
ULYSSES G. MANNING.  
DEAR SIR: Under another cover we mail you a paper containing one of our ads, which we trust you will kindly criticize for us. We take a great deal of interest in your department in the AMERICAN DRUGGIST, and have received many valuable suggestions.

A. E. WALDON & Co.

I would be glad to know that this department was responsible for some of the excellence of this ad. It is a thoroughly good one.

## An Ordinary Druggist

In Montreal was the first to discover the use of a compound powder for leavening dough and though it was but a few years ago, the compound—Baking Powder—has become an important article in every household the world over.

The original formula was never a secret and soon became known to all. There is no mystery about making a pure baking powder, but in order to produce a cheap powder some manufacturers make it with alum, ammonia, acid phosphate of lime, and other equally injurious substances, that will produce indigestion and other stomach troubles to the consumer.

Waldon's Baking Powder is guaranteed Absolutely Pure and below are given some comparisons in price with other pure powders.

Dr. Price's 50c for 12oz or 67c per lb

Imperial . . 50c for 12oz or 67c per lb

Royal . . . 50c for 12oz or 67c per lb

Pure Gold 50c for 12oz or 67c per lb

#### Waldon's Full 16oz Tins for 40c

The White Star, Snow Drift, Ocean Wave, and other cheap brands are not guaranteed pure by the manufacturers.

Waldon's is used by the best families in Calgary and by the Holy Cross Hospital, Medicine Hat Hospital and Golden Hospital. Ask your dealer for it. Take no other.

## A. E. Waldon & Co.,

### DRUGGISTS, CALGARY.

able to determine what they want before going to the store, but can tell about what the gift will cost. This helps to make selling easy and saves time and talk on both sides. The only better booklet I have seen this year was gotten up on the same lines, but a little larger. The various divisions of the booklet were introduced by clever little talks on: "How to Suit Men," "How to Suit Ladies," etc. The booklet contained 16 pages, and these talks, illustrated by attractive cuts, were given on about every third page. Prices were given more in detail, so that a customer could have safely ordered by mail. On the last page were "Hints to Buyers." Early buying was urged. By payment of a small advance, articles would be set aside. The offer was made to keep in repair all the pocket books bought there. Goods to be sent away would be packed and shipped for customers free, etc. Mr. Sands may be able to

The criticisms I might make are of so little importance that I will make none. It would be well to tell, in a subsequent ad., what pure baking powder is made of. There is enough matter in this ad. Space will not permit of the reproduction of the ad. in its original size. It occupied 8 inches double column. The headline is good, even though slightly foreign to the subject. It is bound to attract attention, and the matter that follows has sufficient news interest to secure it a reading. The argument is good, and is clinched by the comparison with other powders, in which it is shown that this has price on its side. The final allusion to the public institutions that use the powder is in effect a first class testimonial. The ad. is a well balanced one. There is nothing remarkable about either display or wording. It is simply a clear, straightforward argument—an ad. that has business in it.



## NEWS OF THE FORTNIGHT.

### Boxes and Cartage.

The Western jobbers are reported to have had a secret meeting at which plans were proposed for disciplining the Boston house which did not support the charge for box and cartage convention.

### Associations.

The meetings of the chemical societies are given in our scientific columns (page 48). The New York alumni made a brilliant success of their first ball (page 65). The New York College of Pharmacy have taken further steps toward remodeling the prison laws (page 64). The New York German American Apothecaries' Association enjoyed their annual dinner and ball heartily, as they so well know how.

### Trouble in Chicago.

Our Chicago correspondent tells of a very interesting condition of things there. Peter Van Schaack has brought serious charges against the Grand Jury.

### Miscellaneous Notes.

Massachusetts pharmacists are preparing a new law vesting more power in the Board of Pharmacy. Reregistration will also probably be asked for.

Philadelphia jobbers contemplate establishing a co-operative box factory.

Wilkesbarre, Pa., pharmacists have been undergoing a Sunday closing movement.

The factories of the glass combine were shut down on January 1 for 80 days. The glass blowers are agitating for higher wages, and there may be trouble by May.

F. B. Kilmer read an exhaustive paper on kola before the Philadelphia College of Pharmacy (page 69).

Pressure is being brought to bear by manufacturers with a view to hastening the decision in the free alcohol cases now pending in court.

### Box and Cartage Question Again.

The Association of Western Wholesale Druggists, which has been in convention in Chicago, have agreed to have a committee go East to confer with jobbers and learn the sentiment regarding the compact to re-establish the box and cartage charges recently broken by Weeks & Potter. The association will be reconvened when the committee are ready to report.

### WHAT WHOLESALEERS SAY.

Vice-president Peters of Fuller & Fuller, Randolph and Franklin streets, upon being interviewed by a local newspaper, said: "This box and cartage question is an old chestnut. It is customary in the Western trade and really works no hardship on the retailer. The charge is only a part of the price of goods as quoted to the consumer. I hardly think it is a proper subject for newspaper agitation, inasmuch as the retailers are making no serious objection to it, and newspaper interference will only cause needless dissatisfaction among customers of Chicago jobbers. In England the rule is to charge not only box and cartage, but portorage, strapping, nailing, etc., and these charges are itemized in their statements."

J. P. Plummer of Morrisson, Plummer & Co., 200 Randolph street, agreed with Mr. Peters, and, continuing, said: "The margin on drugs, and especially on patent medicines, is very small, and in order to do business we must get so much out of it, whether it is in the form of box and cartage or original prices quoted to customers. The charge is a small one to the consumer, but in the aggregate amounts to a considerable item to the jobber, and would represent perhaps \$15,000 in our business in the course of a year."

An official of the firm of Peter Van Schaack & Son, 140 Lake street, said: "Our firm charges only actual cost of box and cartage and derives no profit from that source. It is treated simply as an item of business expense. The charge has always prevailed west of Pittsburgh, and as there is no competition between Eastern and Western houses it cuts no figure with us whether Eastern houses make the charge or not."

S. A. Humiston of the firm of Humiston & Keeley said: "I can't say what the result of the conference of the committee will be as to the box and cartage charges. The charges will be maintained here and re-established in the East, if possible. Chicago is the closest drug market in the United States, and free box and cartage would simply compel us to make it up from the business by a slight advance in prices sufficient to cover this item. We will endeavor to act in unison, but of course if one firm give free box and cartage we will all have to follow. It would make a difference of many thousand dollars to us in a year."

Robert Stevenson of 94 Lake street considered the proposed abolition of the box and cartage charges a very unwise move, and predicted that it would only result in increasing the prices of goods to the consumer. He said that it was necessary to repack a large percentage of goods, and also to maintain a large num-

ber of trucks for the rapid and economical handling of goods. This costs much, and if not charged on the bill to the purchaser must be made up in prices. He thought that no change should be made.

## NEW YORK CITY.

Samuel W. Fairchild was recently elected an associate member of the New York Press Club.

Mr. Ellis of the firm of Ellis & Gotterman, druggists' sundries, sailed this week for Europe, to be gone about two months.

E. J. Manning, formerly with Reeder Brothers of Fourth avenue and Thirty-first street, is now with E. F. Corbin of Ellenville.

L. A. Ridgeway, formerly chemist to the Columbia Pharmacal Company, is now pleasantly located with F. W. Cole at Filmore, N. Y.

Fire did considerable damage to the handsome drug store of F. W. Schoonmaker at Forty-second street and Park avenue, on the morning of the 19th inst.

Edward John Milhau, son of E. L. Milhau, the lower Broadway druggist, has taken charge of F. O. Warner's, formerly known as the Astor House drug store.

Thomas Leeming & Co. have admitted Thomas L. Leeming, Jr., as a partner to the firm, which now consists of Thomas Leeming, Joseph Leeming and Thomas L. Leeming, Jr.

W. H. Brill, manager of the Bosshardt & Wilson Company's petrolatum department, has been in the city for several days, and was well entertained by members of the drug trade.

J. Timpson, manager of the London office of Johnson & Johnson, who arrived here on the 10th inst., proved that he was over merely on a flying business trip by taking his departure on the 15th.

"He's swinging round the circle" is what inquiring friends of W. T. Case are told when they ask to see him just now. Mr. Case is the representative of C. F. Boehringer & Soehne, and he started on his regular trip last week.

By the text of the proposed new excise law for New York City, the pharmacist's license is fixed at \$50. The all-night license in cases of "public necessity" is provided for, and the cost of this is placed at not less than \$300 nor more than \$500.

The banquet of the Board of Trade and Transportation occurred at the Hotel Savoy on the evening of the 18th inst. A table was set apart for the Drug Trade Section of Board, and the members enjoyed the dinner, which was on the usual lavish scale, hugely.

R. P. Domschke, well known in retail circles here as a graduate of the New York College of Pharmacy, and formerly of Milhau's Pharmacy, is now visiting the trade in the interests of the perfume department of Williams, Davis, Brooks & Co., carrying the Dabrook perfumes.

Recent news from Starke, Fla., is to the effect that Max Bach, the druggist who was recently arrested in Brooklyn charged with a double murder near that place last June, has been discharged.



The State had no evidence whatever, and Mr. Bach, who was a nephew of the murdered couple, easily proved an alibi.

Allaire, Woodward & Co. have given up their New York office at 116 John street and the stock has been moved to Peoria, Ill. F. A. Woodward will leave shortly for that city.

Gus Strasburger, a well known alumnus of the New York College of Pharmacy, is receiving the congratulations of his many friends on the announcement of his forthcoming marriage to Miss Eisner. G. S. is one of the best known of Eisner & Mendelson's city representatives.

A. T. Dargan, formerly city salesman for Tarrant & Co., now occupies a similar position with Sharp & Dohme. Mr. Dargan has a wide acquaintance among the New York druggists and his acquisition to the force of Sharp & Dohme is a valuable one.

Johnson & Johnson have just received a shipload of fresh kola nuts of unusually fine quality for use in the manufacture of their kola preparations, all of which are selling remarkably well. The effects of their liberal advertising expenditures are manifest in every drug store in the city.

One of the most disappointed "workers" of those who fought hard to bring the National Democratic Convention to this city was Samuel W. Fairchild, the well known manufacturer. Mr. Fairchild put his whole heart into the task of bringing the convention here, as he does into everything he undertakes.

H. W. Boyd, manager of the Salem Chemical & Supply Company of Salem, Mass., spent a day in this city en route to Philadelphia, where he was going in the interests of his firm. Mr. Boyd reports business in a very flourishing condition and considers the business outlook as very promising.

To-day four new post office sub-stations for the sale of stamps, the issuance of money orders and receipt of registered letters will be opened in drug stores as follows: No. 41, Lexington and Fifty-sixth street; No. 42, Amsterdam avenue and Ninety-first street; No. 43, East Broadway and Montgomery street; No. 44, at West Farms.

Richard W. Cass of 48 Spalding street, Lockport, the popular head clerk of Sweet's drug store, died January 6 of consumption. He was 46 years old and leaves a widow and two children. Mr. Cass had a great many friends in Lockport. Despite the ravages of disease, he was always cheerful and invariably had pleasant greetings for every one.

Dr. R. T. Gurney, who has been with Seabury & Johnson for the greater part of the past fourteen years, recently recovered from a very prolonged and severe attack of inflammatory rheumatism and is now traveling in Florida and the South for the White Tar Camphor Company, the condition of his health necessitating his going to a warmer climate for the winter.

Professor Peter T. Austen of the Brooklyn Polytechnic Institute and chairman of the New York section of the American Chemical Society has assumed the editorship of the science department of the *Brooklyn Manufacturer*, a newly established journal, and has made his department in the initial number a highly interesting one. We quote several notes from it in this issue.

Several foolish young men employed by Tarrant & Co., who were tempted by the pretty cologne bottles and other toilet articles in the house, made use of them as Christmas presents to their lady friends. Detectives were put on the case, and after admitting their guilt the culprits were all discharged, the firm not desiring to disgrace them by public arrest and trial.

S. Lyman Davies, a druggist of Saugerties, has had a rival, Harvey W. Adams, arrested there for criminal libel. He charges him with sending the following telegram to New York wholesale houses with which Davies traded: "Legal action for payment of debt may be made very soon against firm in Saugerties. You may be interested in." The telegram was signed, "J. Smith."

Louis A. Lehmaier has been appointed receiver of the Home Tablet Company, manufacturers of medicine tablets, at 127 West Thirty-second street, by Judge Truax, on the application of the directors for a voluntary dissolution of the company, which was incorporated in January, 1895, with a capital stock of \$50,000. Mr. Lehmaier is the treasurer. Liabilities, \$7,124; nominal assets, \$7,407; actual assets about \$8,700.

Caswell Massey & Co. have opened another branch store, which is located at the corner of Seventy-seventh street and Columbus avenue. The store is very handsomely fitted up and contains a number of new features. The store will be in charge of Mr. Butler, who has been with the firm for some time at their Forty-seventh street store. Mr. Butler will be assisted by A. W. Belknap, who was formerly with the firm on Broadway and who later owned a store on 125th street.

At the last meeting of the trustees of the New York College of Pharmacy, Professor Rusby announced that Messrs. Lehn & Fink had donated to the college a very valuable collection of rare drugs and chemicals, which they had accumulated from exhibitions, which was much appreciated in that it contained many specimens not in the museum. The firm were voted the thanks of the college. Messrs. Lanman & Kemp were also thanked for specimens of new and rare drugs.

Every one wishes for the continued success of the Drug Trade Club, but some of its best friends and members would hardly care to wager money on the success of its latest scheme. It has just issued a call for subscriptions to enable the Board of Governors to secure more desirable quarters than those at present occupied by it. The subscriptions are to form a guarantee fund and the amount sought to be raised is \$5,000, parceled out in \$100 lots from 50 members. The subscriptions to be free from interest.

There was a well attended meeting of the officers and representatives of the various houses taking part in the Wholesale Drug Trade Bowling Tournament at Seabury & Johnson's, on the 18th inst., on the question of classifying. There was considerable argument on the subject, but when the matter was put to vote it was found that the majority of the sentiment was in favor of not dividing. In fact only two houses opposed it. It was also decided that after February 1 all the bowling would be confined to the upper alleys.

Recently an attempt was made by thieves to rob the safe in the Grasselli Chemical Works in Tremley, N. J. An entrance was effected into the office by means of forcing a window, and then the thieves went to work on the safe. They bored holes in the door of the safe near the combination lock, but did not blow the safe open. It is thought that the thieves were frightened away by some passerby, and were afraid to complete the job. This was the second attempt in a year to rob the safe in the chemical works. The first attempt was also unsuccessful.

Mayor Wurster of Brooklyn has appointed Timothy L. Woodruff, president of the Maltine Mfg. Company, Park Commissioner, in place of Squier, resigned. Mr. Woodruff comes of revolutionary stock both on the paternal and maternal side. He is an active member of the Society of the Sons of the Revolution. His father, the late John Woodruff, represented the New Haven district in Congress from 1855 to 1865. He himself graduated from Yale University in 1879, and then took a business course at Eastman College, Poughkeepsie. He has been successful in all his business ventures. He was a delegate to the Republican National Convention in 1888, and in 1889 and 1890 he was a member of the State Committee.

Nearly all of the wholesale houses are represented now in the throng which takes possession of the "Anarchists' Den" every Saturday. That is the title which E. G. Wells of Crittenton & Co. has given to the basement restaurant at Fulton and Dutch streets, now much affected by the drug and paint trade. The latest applicant for a place at the drug table was the perennially young and cheerful H. W. Henning of Cedar street. Mr. Henning possesses some skill as a prestidigitateur, and put himself at once on a solid footing with the diners by his clever exhibitions of legerdemain.

Coffin, Redington & Co., of 72 John street, are among the firms that are booked to seek new quarters about May 1 in order to make way for the new office building that is to occupy William street, straight through from John street to Platt. The structure will be one of the highest and biggest of the immense sky scrapers down town, for it will extend back fully 100 feet. There were rumors that the stores and offices would be taken up entirely by drug houses, and this may be found to be true later on, but there is nothing behind the story that it was intended for a drug exchange, and that the only occupants of the structure were to be wholesalers, jobbers and importers in drugs and druggists' specialties.

Dr. John S. Billings has accepted the post of superintendent-in-chief of the consolidated Astor, Tilden and Lenox Libraries of New York. The trustees offered the place to Dr. Billings some time ago, but he was unable to accept it immediately on account of his engagement with the University of Pennsylvania, of which he is the director of the department of hygiene. The trustees of the consolidated library held their regular monthly meeting yesterday, and it was announced that an arrangement had been made by Dr. Billings with the university by which he will be able to accept the office and begin his duties at once. Until June 1 he will divide his time between the library and the university. After that date he will give his

entire attention to the library. The trustees regard the selection of a librarian as the most important action taken since the consolidation.

#### THE DRUG TRADE SECTION ELECT OFFICERS.

The annual election of the Drug Trade Section of the Board of Transportation took place on the 18th inst., and resulted in the choice of the following: Chairman, James Hartford of Schoellkopf; Hartford & MacLagan; vice-chairman, Albert Bruen of Bruen, Ritchie & Co., treasurer, H. J. Faris of H. J. Baker & Bros. (re-elected); secretary, Wm. J. Schieffelin of Shieffelin & Co. (re-elected), and representative of the section in the Board of Trade and Transportation, John M. Peters of the Fraser Tablet Triturate Company. The day's proceedings opened with a most elaborate lunch, to which about 80 members did full justice. There were oysters, soup, quail on toast, salads, cheese and coffee. On motion of Samuel W. Fairchild, a vote of thanks was given the retiring officers, and then the reports of the various committees were read. The most interesting were those of the Committee on Legislation, which referred almost entirely to the alcohol question; of the Committee of Importers, with special reference to claims against steamship companies, and of the Committee on Fire Insurance Rates.

#### THE COLLEGE MEETING.

The regular meeting of the New York College of Pharmacy was held in the museum of the college on Tuesday evening, January 21, with President Fairchild in the chair. An unusually large number of members were present to take part in the discussions of the proposed changes in the poison law.

The committee appointed to draft a schedule of poisons for embodiment in the poison law was composed of Messrs. Atwood, Massey and Bigelow, and Professors Rusby and Coblenz. Mr. Atwood, the chairman of the committee, submitted a report and explained the manner in which the members had gone about their very important duties. Professor Rusby explained that the frequency with which a poison was called for had been taken into consideration in determining what schedule to place it upon as well as its degree of toxicity, so that a very rare poison might appear on Schedule A, while at the same time it might happen to be less virulent than some more frequently used poison which the committee had deemed expedient to place on Schedule B. After some discussion of the details of the schedules the report was approved of and the president was instructed to appoint a committee of three who should be instructed to formulate a poison law incorporating the schedule submitted by the college committee and consulting the attorneys of the college and to have the bill introduced into the Legislature when in shape.

The next business before the meeting was the discussion of several minor amendments to the constitution and by-laws of the college. Mr. Atwood and Mr. Macmahan both directed attention to some discrepancies between the present by-laws and the new charter which required further verbal alterations in the by-laws. The president was authorized to appoint a committee to revise the by-laws and to submit them in the revised form to an adjourned meeting of the college to be held on February 4.

Mr. Atwood submitted his report as chairman of the Commencement Committee which was approved. The president announced the following as the Nominating Committee, whose duty it should be to submit nominations for officers for ensuing year at the next regular meeting of the college which is to be held in March. Messrs. Atwood, Rice, Molwitz.

Mr. Mayo presented a resolution authorizing the president to appoint a committee of five to consider the feasibility and, if feasible, to make arrangements for the presentation of papers on pharmaceutical topics at the meetings of the college. The resolutions were warmly indorsed by Professors Rusby and Coblenz and Messrs. Macmahan and Fairchild and were unanimously adopted. Mr. Mayo also moved that the secretary be instructed to inform the representatives of New York in Congress that the college indorsed the bills for the reorganization of the pharmaceutical service of the United States Army, the United States Marine Hospital Service and the United States Navy which have been introduced in the House by Mr. Crisp of Georgia. The motion was carried and the secretary was instructed accordingly.

There being no further business meeting adjourned to convene on February 4.

#### German-American Apothecaries' Ball.

The annual ball of the New Yorker Deutschen Apotheker Verein, which was held at Teutonia Hall, Sixteenth street and Third avenue, on the 17th inst., was one of the largest and most enjoyable in the history of the Verein. It was midnight before the fun really began, but when it started the 100 couples or more that were in attendance saw to it that it did not abate. President V. Kostka was here, there and everywhere, looking after the comfort and enjoyment of the druggists and their pretty wives and daughters, and his efforts at filling the atmosphere with good fellowship were ably seconded by floor manager M. Arnemann.

To tell of all who were there would be simply to reprint the names of about all the retail German druggists in this city and Brooklyn, not to mention one or two from Jersey City and Newark. There were also delegations from the big wholesale houses. George Strauss and family, Mr. Olivet and several others represented Lehn & Fink; Mr. Amend represented Eimer & Amend; George T. Riefflin and wife appeared for Sharp & Dohme, and Parke, Davis & Co. and several other houses were in evidence. Among the more prominent retail druggists noted were: Dr. Tschepp and Mr. Schur of Tschepp & Schur; O. Alexander, H. C. Wurm, Dr. Wetengel and daughters, Mr. Dohrenwend of Leister & Dohrenwend; H. Behrens of Brooklyn; Charles E. Kessler, Paul F. Gebicke, E. J. Sultan and R. Staebler, Newark.

In welcoming his guests at supper, President Kostka stated that in five years more the society would celebrate its golden jubilee—the fiftieth year of its existence. He hoped that when the anniversary came round he would be able to welcome them in the name of the society to a building of their own.

Mr. Kostka's address was received

with applause, and Dr. G. Pfingsten and others made speeches which were also well received. It was well on to opening time when the members and their friends dispersed to their homes.

#### Brooklyn Druggists for Cheaper Telephones.

Brooklyn has taken the lead in the fight against the telephone octopus, and if New York and adjacent towns give the support expected of them the "hello" autocrats will find themselves in serious difficulties before winter is over. Cheaper telephones and better service long has been the cry of both cities, but, though numerous well-planned fights have been made for the accomplishment of this end, the old rates have not been reduced, nor has there been much visible or audible improvement in the system.

But Brooklyn merchants have risen even more determined than before from each defeat, and once more the fight is to be carried to Albany. Assemblyman Audett will champion their cause, and he is confident of giving the trust one of the most interesting shake-ups in their history. The Kings County Pharmaceutical Society are at the head of the present crusade and has the hearty indorsement of 1,000 merchants and professional men in its efforts. Assemblyman Otto J. Audett was recently approached by a committee of this society, and he was urged to take up the matter and he readily agreed. For his guidance the society drafted a bill to be known as the "Reform Telephone bill," which is said to be one of the most comprehensive documents yet framed on the subject, but the details of which are as yet withheld from the public.

#### Smuggling Antipyrin

Special Treasury agents searched the room of the surgeon on the steamship "Westernland" of the Red Star line recently, and found 88 1-ounce packages of antipyrin, valued at \$125. This was the first seizure of the kind since the special agents began watching a fortnight ago for the smuggling of antipyrin and phenacetine by ship's surgeons. The recent advance in prices of these articles and the high duty seemed to have checked open imports without diminishing the supply in the market. Reports to this effect made Treasury agents watchful. The ship's surgeon had stowed the antipyrin between the lower drawer and the floor in the room containing his medicine cabinet.

#### Westchester Association.

At the regular quarterly meeting of the Westchester Pharmaceutical Association, held at Mt. Vernon last week, the following officers were elected: Dr. Albert Van Houten of Yonkers, president; F. Oliver and C. Greig, vice-presidents; L. J. Schlesinger of Yonkers, secretary; J. B. Sackett of Tarrytown, treasurer; George Gill of Mt. Vernon, E. Alexander Houston of Yonkers and J. K. Hart of Sing Sing, Executive Committee. The next meeting will be held in Croton Landing in April next.

## THE ALUMNI BALL.

## A Great Social Success.

Score one for the Alumni Association of the College of Pharmacy of the City of New York! The first annual reception and ball of the association, held on the evening of Wednesday, January 22, in the Assembly Hall of the Madison Square Garden was a complete success. It was the most largely attended affair of the kind ever held under the auspices of the college, and was certainly one of the brightest, gayest and most brilliant gatherings of pharmacists and their friends ever gotten together under one roof in the City of New York. The pharmacists of the Quaker City have always been noted for their success in organizing social as well as scientific meetings, and they have frequently been held up as exemplars in these respects, but we doubt if any of their most noted successes ever surpassed the initial effort put forth in this direction by the alumni of New York. There was nothing to mar the gaiety of the evening, and every face reflected the cheerful enthusiasm which goes with success. Every one present, from members of the faculty down to undergraduates, seemed to share in the general enthusiasm, and even Schuyler, the dusky caretaker of the college, who is hardened by many years of contact with feelingless undergraduates, evinced the pride he felt, and it was evident that no one enjoyed the general jollity more. He was reinforced by his predecessor in office, the veteran "Carroll," who is better known to a former generation of graduates perhaps than to those who took part in Wednesday evening's ball. O. J. Griffin, the genial and popular clerk of the college, was very much in evidence with the Ladies' Wheel Club of Flushing, the members of which took advantage of the proximity of the ballroom to the Bicycle Exhibition to attend both. He was accompanied by Mrs. Griffin, who earned the distinction during the evening of being one of the best dancers on the floor. Miss Hepburn, daughter of the well known and respected pharmacist, John Hepburn of Flushing, was one of the charming wheel women of Mr. Griffin's party. The faculty of the college was ably represented by Professors Coblenz, Ferguson and Diekmann, and the share they took in contributing to the pleasure of the evening was thoroughly appreciated by every member of the association. Secretary Mason helped along things greatly by his presence, and none enjoyed the dancing more. The trustees of the college were represented by Reuben R. Smith, who was accompanied by Mrs. Smith. The absence of President Fairchild was much regretted. He was prevented from attending by the serious illness of his wife's father, Judge Tappan. A. C. Searles took an active part in the festivities, and much of the credit for the smooth way in which things ran during the evening is due to him. Fred. Hohenthal, the editor of the *Alumni Journal*, added greatly to his popularity by his efforts to make all feel at home and his services in introducing strangers.

It will be gathered from what we have said that the affair was a thoroughly enjoyable one, and reflected considerable credit on the Committee of Arrangements, composed of Julius Tannenbaum, chairman; Wm. H. Ebbitt, Adolph Henning, Arthur C. Searles, John Oehler, Rudolph Gies, Geo. Burger, Geo. C. Diekmann, M.D., Ewen McIntyre, Wm.

A. Hoburg, Jr., Thos. M. Davies, Eugene F. Lohr and Timothy B. Breen.

The signal for the opening of the ball was given shortly after 10 o'clock, and the dancers formed for the grand march, with Mr. and Mrs. A. C. Searles leading off. Over 100 couples participated, and the number was added to in the course of the evening, until it was estimated there were over 150 couples on the floor, the total attendance reaching fully 850. The dancing continued without intermission until shortly after midnight, when every one adjourned to the banquet hall, where supper was served. The long table was presided over by President Stover, who was flanked on either side by Julius Tannenbaum, Herman A. Graesser, Harry Heller, A. Henning, Arthur C. Searles, Wm. A. Hoburg, Jr., Professor Ferguson, Rudolph Gies and others. The large banquet hall was taxed to its utmost capacity, and accommodations had to be provided for the guests at a number of smaller tables.

Toward the close of the supper A. C. Searles arose, and briefly introduced President Stover, who expressed the pleasure it gave him to return thanks to all who had contributed to the success of the reception by their presence.

In response to repeated calls, Herman Graesser, ex-president of the Alumni Association, made a brief address. After acknowledging the compliment implied in the invitation to address the assembly, Mr. Graesser spoke of the efforts which had been made to bring the graduates of the college together in affairs of the kind represented by the evening's gathering, and referring to the large attendance of undergraduates, he considered it one of the best of omens for the future success of the association.

The committees under whose direction the affair was conducted were as follows: Floor Committee—Charles T. Cubitt, chairman; H. C. Yager, Harry Heller, G. H. Carter, S. S. Shears. Reception Committee—Herman A. Graesser, chairman; Frederick Hohenthal, Nelson S. Kirk, M. J. Coates, H. Jewett McKellar. Press Committee—William H. Ebbitt, chairman; A. Henning, J. Tannenbaum. Arrangement Committee—Julius Tannenbaum, chairman; William H. Ebbitt, Adolph Henning, Arthur C. Searles, John Oehler, Rudolph Gies, George Burger, Geo. C. Diekmann, M.D., Ewen McIntyre, Wm. A. Hoburg, Jr., Thomas M. Davies, Eugene F. Lohr, Timothy B. Breen.

In addition to those mentioned above, the following is a partial list of those present at the ball: Carl Mittenzweig, Eugene Lohr, Francis Warner, Robert Cordner, C. W. Race, William Gregorius, F. Borggreve, P. H. C. Winkler, J. Horton Uhle, C. P. Freschbier, G. F. Burger, Arthur Worthington, W. H. Finkernagel.

Among the ladies present mention must be made of Mrs. R. Gies, whose costume was much admired; Miss Specker, Miss Prager, Miss Abendroth, Miss Fieberling, Miss Klein, Miss Hoburg, Miss Estelle Boyer, Miss Lohr, Miss Mittenzweig, Miss W. Lotze, Miss Briggs, Miss Bollingham, Miss Barnett, Miss Vogel, Miss Ellsworth, Miss Coleman, Miss R. Fraser, Miss Gladhill, Miss Range, Miss Valerius, Miss Herold, Miss Leavens, Miss Fredericks, Miss Schall, Miss Borggreve, Miss Jacobs, Miss Kauffman, Miss Blument, Miss Klein, Miss Worthmann, Miss Remington, Miss Ingersoll. The married ladies present included, among others: Mesdames Smith, Breen, Remington, Rogers, Hanck, Doherr, Hayward,

Humphreys, Ottendorf, Warner and Tracy.

Many well known wholesale firms of the city contributed to the success of the gathering by the presence of their representatives, and in a few instances of members of the firms themselves. W. H. Schieffelin & Co. were represented by Wm. H. Ebbitt, who was chairman of the Press Committee, and who contrived to make things exceedingly pleasant for the reporters. Fox, Fultz & Co. were represented by the head of the firm, Clarence Fox, and M. R. Thurlow. Parke, Davis & Co. were in evidence with Chas. E. Smith. Whittall, Tatum & Co. by Albert Tatum and W. W. Tamlyn. Johnson & Johnson had a representative present in Mr. Rogers. Wm. R. Warner & Co. of Philadelphia and New York could scarcely be overlooked with the beaming countenance of H. I. Yager so much in evidence. The absence of Brent Good was made up for by the presence of his son, Harry, and Mr. Toy. Jas. Tufts of Boston and New York was remembered by Mr. Ellsworth, his New York agent; Keasby & Mattison by A. N. Cox; the Young Perfumery Company by A. L. Brady; the Low Art Tile Company by J. H. Sangston.

It was far into the morning hours before the dancers dispersed. The enjoyment of the evening was sustained to the close, and many were the expressions of praise bestowed on the efficient committees which had charge of the general arrangements.

## CONNECTICUT.

## Annual Meeting of the Association.

NEW HAVEN, January 22.—Elbert E. Fisher of Bridgeport, local secretary of the Connecticut Pharmaceutical Association for the twentieth annual meeting to be held in Bridgeport, February 4 and 5, announces the completion of arrangements for the annual meeting and banquet. The meeting will open in Atlantic Hotel on Tuesday morning and the banquet will be given in the same place in the evening. Several interesting papers are promised for the meeting in competition for the cash prizes offered by the association. As Bridgeport is easy of access, a large attendance of members is assured, and a number of distinguished representatives of pharmacy and medicine have already signified their intention of being present.

## Items of Interest.

C. C. Lippitt has succeeded Willard B. Moon in the management of John Moon's drug store on Bank street, New London.

Charles McManus, a clerk in the Hogan Company's drug store, at Derby, was recently married to Miss Annie Deady, of Seymour.

S. D. Platt has entered the shoe business at Winsted. Mr. Platt formerly conducted the drug store at Torrington which is now occupied by C. Dougal.

Rockwell A. Lyon, the Danielson druggist, has taken in partnership Charles H. Burroughs, who has been in Mr. Lyon's employment for nearly 30 years.

The druggists of New Haven expect that a new medical examiner will be appointed in New Haven ere long, now that State Attorney Doolittle has resigned.

## MASSACHUSETTS.

BOSTON, January 20.—The yearly assembling of the Legislature is sure to be followed by legislation pertaining to pharmacy, and the present session will be no exception to the rule. The first bill offered this year was recently introduced in the Senate, and according to the title is

## AN ACT TO REGULATE THE PRACTICE OF PHARMACY.

The bill is the outcome of the recent codification and consolidation of the laws relating to pharmacy, but provision is made for several changes that will affect pharmacists all over the State. The changes are urged by the State Board of Pharmacy as necessary for the proper enforcement of existing laws, especially those relating to the sale of intoxicating liquors by druggists.

## REREGISTRATION.

One of the most conspicuous provisions is the one for reregistration in pharmacy once in two years. There is no such thing under our State laws at present as reregistration.

But the members of the State Board have desired re-registration for a long time, and this year are more hopeful than ever.

## ANOTHER CHANGE PROPOSED

is the uniting of the departments relating to the enforcement of pharmacy and liquor laws, which departments have always been distinct, thereby causing great inconvenience and difficulty to the board in arranging and maintaining two separate accounts.

The bill asks for an appropriation of \$10,000, and believes that with this assistance and the union of the departments the work can be improved and greatly facilitated.

The board usually, according to law, makes its complaints against offenders within 15 days after the fault has been committed, but the present bill asks an extension of time, reading 90 days instead of 15.

According to the new bill, the board not only has the power of reviving a decision it has made against granting a license, but in addition it makes a point of having the right to revoke a license granted, if cause is shown that the recipient is not a fit person to hold it.

## ANOTHER CHANGE DESIRED.

The following change is also desired: When a registered pharmacist makes application for a certificate upon which to base an application for a sixth-class license, he deposits \$1 with the board. If the certificate is granted the \$1 is retained; if not granted the money is returned to the applicant. The new bill provides that in either case the \$1 is to be retained by the State.

## SENSATIONAL EMBEZZLEMENT.

A sensation has recently been caused in Brookfield, Mass., by the defalcation and flight of the treasurer of the Brookfield Savings Bank, Hiram P. Gerald. He was a well known druggist, a member of the Board of Registrars and one of the firm of Cole Mfg. Company of E. Brookfield and had been town clerk for 20 years. The bank was a small concern kept in the rear of the drug store, but the defalcation is thought to amount to about \$10,000,

which is the amount of the treasurer's bond.

Suspicion was aroused against the bank some weeks ago when Gerald was slow about meeting payments, and it was supposed that the bank was dying the natural death of a poor little bank, and it was only when the trustees concluded to wind up the business and obtained a receiver that the crookedness was exposed.

The depositors' books and the bank's record showed serious discrepancies. The bondsmen held a meeting and gave Gerald a few days to square himself. He avoided the trustees for two days, then took a team to look after some property, but as it afterward proved he drove to Palmer and there took a train for the West.

The feeling of the town is that of regret, and no animosity is displayed toward the defaulter, believing him to have been more careless than vicious. He belongs to a respectable old family, and has always been prominent in town affairs and was unusually trusted and respected.

## BOSTON DRUGGISTS TO DINE.

The last dinner of the Boston Druggists' Association was held at Young's Hotel, and was successful, as have been all of these occasions during Mr. Canning's presidency. Rev. J. B. Gould of Newton was the guest of the evening. He delivered an after-dinner talk on "Familiar Personal Reminiscences of Statesmen I Have Met at Home and Abroad." Mr. Gould's fund of experiences made the occasion one of great pleasure to the members. A discussion upon the desirability of being longer represented upon the Massachusetts State Board of Trade followed. It was finally decided to continue the custom. [The resignation of Hon. E. G. Frothingham of Haverhill was accepted. The arrangements for the annual dinner which is to be held at the Parker House on the 28th inst. were then considered. The Committee on Annual Dinner was appointed as follows: Henry Canning, Dr. Thomas L. Jenks, Hon. Gorham D. Gilman, Joel S. Orne and James O. Jordan. Representatives of the United States Government, the State and city will undoubtedly attend the banquet. President Canning appointed this Committee on Nomination of Officers: Amos K. Tilden, Ernest C. Marshall and George W. Cobb.

Some time during the night of January 15 the store of George E. Yahmig, located in Holbrook, was entered, and all goods of value in the perfumery, confectionery and tobacco line were taken. What the thieves considered of insufficient value to carry away they rendered worthless by mixing or destroying. The drugs were not molested, but the goods taken will prove a considerable loss to Mr. Yahmig, a young man just starting out in business.

## ROXBURY DRUGGISTS ORGANIZE.

An organization of the retailers of the Roxbury district is now under way. A meeting was recently held and the question of prices was discussed at length. A committee of five was appointed to visit those not in attendance at the meeting, the purpose being to ascertain whether or not all would agree to a schedule. If the organization is completed it is proposed to carry on the work on the lines laid down by the Guild. Truman T. Reid was elected president and Charles A. Miller secretary.

## In and About the Hub.

Bullock & Waldoon, New Bedford, have assigned to Charles E. Ellis.

Burton Whitcomb, 574 Main street, Charlestown, failed recently. Edwin P. Bryant has been appointed assignee.

Bauer & Black, Chicago, and Johnson & Johnson, New York, have signed the agreement of the N. E. R. D. U.

For several years Malden druggists have not received sixth-class licenses. Now, however, the retiring chief of police in his annual report recommends the licensing of druggists.

Herbert Neilson, a well known druggist of the Roxbury district, died December 27 at his residence, 698 Shawmut avenue. He was 51 years old, and was a native of Halifax, N. S.

The recently formed Dorchester Apothecaries' Society is officered as follows: President, W. F. Green; vice-president, R. H. Billings; secretary, C. H. Davis. Executive officers: F. M. Loring, F. W. Archer and A. H. Copley.

Two consecutive days' orders of the middle of January received by James W. Tufts were for 24 cold soda fountains, amounting in value to nearly \$15,000. Not so bad for this early stage of the game.

The store of F. H. Martin, on Washington street, which was raided recently by the police and a quantity of liquor seized, is now closed. Since this occurrence Mr. Martin has figured in the courts and daily papers as a bigamist.

The dispatch recently issued to the daily papers from New York, stating that the Universal Trade Association had secured a large membership among the retailers of that city is not considered worthy of belief here. The dispatch is looked upon as a hoax.

Lynn has many expert bowlers, and some of the drug clerks of that city are capable of playing a clever game. The pill rollers have organized a team which has joined the city league. The clerks expect to give a good account of their prowess before the season closes.

Henry Canning, F. H. Harris, W. C. Durkee, G. W. Cobb and F. W. Reeves attended the recent meeting of the Rhode Island Pharmaceutical Association and were the guests at the banquet. The eloquence of this quintet was called into play during the after-dinner exercises.

At the last meeting of the Paint and Oil Club of New England, Dr. A. B. Heath and Rev. L. M. Powers were the guests. C. W. Badger was chosen a member of the pricing committee for February. L. C. Hill was elected delegate to the Massachusetts State Board of Trade. The February meeting will be devoted to the ladies.

Another case of "wrong bottle" is reported from Lynn. A woman and her son took what was supposed to be cough medicine. The boy's dose was small and he escaped without much suffering, but the woman was made severely ill and has since died. It is not known what the bottle contained as the contents were all consumed.

A very interesting case has just developed in Malden, in which the city of Everett is jointly interested. A prominent young society lady of Malden has



threatened to bring suit against one of the leading druggists in Everett. The names of the interested parties are withheld pending a settlement. It is stated that a few days ago the lady in question, who has been recently married, entered the drug store in Everett and called for a cup of hot chocolate. After it had been given her, it is claimed that the druggist reached over the counter and seized her by the face and kissed her. When she arrived home she informed her husband of the case, and the druggist was given, by letter until to-day to settle and apologize, otherwise a suit for \$1,500 will be instituted. The druggist was acquainted with the lady but only casually.

## PENNSYLVANIA.

PHILADELPHIA, January 22.—Owing to the inability of the Western Committee to induce all the proprietary manufacturers and wholesale drug houses to agree to a plan for making a charge on cartage and boxing, it has induced a number of the better known druggists of Philadelphia to take the matter up, and in all probability there will be established a box manufactory, which is to be conducted by the trade. It is claimed that only about 25 per cent of the boxes required by the various houses can be used over. The item for boxes alone is a large one, and many of the manufacturers, it is thought, will enter into the scheme, as it will benefit them. There is always more or less trouble in getting the trade to work in harmony, but it is thought that if each large house will take some shares of stock in the new concern it will meet with success. It is contended that it will require only a small outlay to start the box factory in operation, and while nothing may come out of the suggestions which have been made, it is nevertheless under consideration by some members of the trade, and may result in the present box manufacturers cutting down their prices.

### SABBATH OBSERVANCE IN WILKESBARRE.

There has recently been a Sunday closing movement started in Wilkesbarre, and the committee of the Sabbath Union, which has this matter in charge, has endeavored to get all stores to close their doors on this day. On December 29 most of the stores, including the drug stores as well, closed, but on the following Sunday there was not such a general observance. The drug store proprietors who had closed on the first Sunday kept open the following, claiming that they were compelled to do this on account of competing houses doing likewise. The sentiment among the drug trade is for closing. It is said that a petition is being circulated among all stores for an observance of the Sabbath. J. W. Hollenbach, president of the Northeastern Pennsylvania Sabbath Union, when seen recently said:

"The committees have been instructed to see and converse with all classes of business men who have been in the habit of doing business on the Sabbath day, and to use every reasonable effort to induce violators to obey the law. If any have been missed it has been unintentional. We ask saloon keepers and all other classes of business men to kindly fall in line and join the great number of Sabbath observers in suppressing the open, bold and flagrant disregard for the laws in this respect. The question is not whether the individual shall do his duty

as a Christian. It is simply, will he voluntarily yield reasonable obedience to the law as a citizen. It is not pleasant for a private citizen to be enforced to embark in work of this character, but it does seem necessary that some steps be taken in this matter, and at once. We trust that prosecutions may not be necessary, and that the good sense of the business men will prompt a cheerful compliance with the movement."

On January 12 another attempt was made by the Sabbath Observance Society to close up the stores, but, as on the previous Sunday, the drug and cigar stores were kept as wide open as on week days. It is now thought that it will be almost impossible to do this without going to law.

### JUAN F. PORTUONDO DEAD.

Juan F. Portuondo, one of the largest manufacturers of high grade cigars in the United States, died on January 7 at his residence, 3228 Chestnut street. Mr. Portuondo had been suffering from pulmonary trouble for about eight years, and during that time had traveled extensively in the South for his health. In November last he came to this city and seemed to be much improved, but soon after he was taken ill with stomach trouble; yet he was so far recovered that he was able to drive out during the holidays, and seemed to be in better spirits. He had made arrangements to go South on December 29, but on the previous Thursday morning he had a hemorrhage. He got over this attack, and on the following Monday seemed very bright, and sat up and talked with his friends on the success of the Cuban insurrection. Shortly after dinner on the same day he grew worse, but the damp, cloudy weather of Tuesday seemed to affect him, and he died shortly after 10 o'clock on that day.

Mr. Portuondo was born in Cuba, July 4, 1848. Being obliged to leave Cuba soon after the revolution. Coming to this city when quite young, he started in the leaf tobacco business and gradually extended his operations. Several years ago Mr. Portuondo discontinued the retail business, having leased the factory at Eleventh and Sansom streets, where his wholesale business had largely increased and demanded his entire attention. His exhibit at the recent World's Fair was unusually fine.

Mr. Portuondo married the sister of John E. Faunce, ex-Speaker of the House of Representatives, who survives him. They had no children. His mother, sister and brother Vincente, another well-known cigar manufacturer, reside in West Philadelphia. Mr. Portuondo and his wife spent their winters mainly in the South, either in Florida, Cuba or Southern California, while their summers were spent at "Fox Hills," not far from the Water Gap. Here Mr. Portuondo had one of the finest stock farms in the State, having made a specialty of all kinds of English bred cattle and horses.

Mr. Portuondo was a member of the Masonic fraternity, and also at one time belonged to some of the prominent clubs, but his poor health prevented him from taking any active part in them. His sympathies were directed toward the Cuban revolution, and although he could not take any active part in carrying on the war, he contributed largely. He was a very charitable man, and gave liberally to almost every appeal that was made to him. He was a man of exem-

plary habits and character. His brand of cigars was very popular with the drug trade.

### THE FREE ALCOHOL QUESTION.

The bills which have been introduced in both houses of Congress at the request of Secretary Carlisle to repeal the clause in the tariff law which provides for the free use of alcohol in the arts is creating considerable attention in the drug trade in this city, and in all probability a committee will be formed to secure co-operation in trying to prevent these bills from being passed. Ever since the law went into effect which allowed all users of alcohol in the manufacture of proprietary goods, etc., a rebate on the tax, nothing has been done to put same in effect by Secretary Carlisle. In this city a committee has been formed to secure all the cancelled stamps on alcohol since the law went into effect, and these have been filed with the Internal Revenue collector. In all probability some speedy action will be taken, as there is some talk of taking the matter to court. If the tax is repealed it means a big saving not only to the manufacturer, but to the consumer as well. The fact that the tax previous to 1894 amounted to \$1.69 2 10 per gallon, at the present time it is \$2.06 8-10, while the cost of alcohol, if there was no tax, is less than 20 cents per gallon, showed the burden placed upon such usage of alcohol.

### SHUTTING DOWN GLASS PLANTS.

On January 1 the window glass manufacturers of this country who are in the combine shut down their plants and will keep them so for at least one month. This action was taken in view of the production being considerably greater than the demand, as at this time of the year there is very little being done in the trade. The shutting down in mid-winter has created considerable ill feeling among the journeymen glass blowers, and there is some talk of making a demand for higher prices before they go to work. It is, however, thought that when the glass plants are ready to start up there will be no difficulty in securing the men to work at the old wages, but trouble is expected when the blasts are blown out later in the season. It is said in some circles that there will be trouble experienced some time in May. This is the busiest season, and if the journeymen should go out it would handicap the manufacturers. The journeymen are anxious to have the 1894 scale restored, but as nothing has been agreed upon they are somewhat reticent in talking on this subject. The window glass manufacturers who are not in the trust are working their plants to their utmost capacity, and there are rumors afloat that a large independent glass plant is to be located in the vicinity of Philadelphia. Where and when this plant is to be put in operation cannot be learned at this time.

### THE H. K. MULFORD COMPANY BRANCHING OUT.

The H. K. Mulford Company, who lately moved from a building on Market street to 412 to 420 South Thirteenth street, are now getting everything into shape and doing a larger business than ever before. H. K. Mulford, the head of the firm, is on a trip through the West and South, where he is introducing their antitoxin. He contemplates going as far West as Kansas City and Omaha, and then to New Orleans and along the south



Atlantic coast. He will visit all the principal cities and get a representative in each of them, so that their goods will be thoroughly introduced. This firm is now able to supply all the antitoxin that is required. At previous times, owing to their plant not being large enough, it was impossible to meet the demand, but as there has been an extension made which gives greater facilities, no trouble will be experienced now in filling all orders. This is one of the principal houses in the country for the manufacture of antitoxin. This firm has lately introduced an improved antitoxin syringe which is incased in a metal holder and is so arranged that case and syringe may be thoroughly sterilized without injury. Another advantage is the rubber tube connecting the handle with the syringe and permitting free movement of the body without danger of breaking the handle or causing pain to the patient. The packing, being made of pure gum, is more satisfactory than asbestos, which they have discarded, as soon as it becomes soft and pliable. The syringe may be easily taken apart and sterilized by boiling. This syringe is creating considerable attention in the trade, and the firm are receiving a number of orders for it. To secure a proper introduction of their antitoxin in the trade, the firm have agreed to give a discount of 20 per cent. on all purchases, which is 10 per cent. better than they have been offering heretofore. As soon as the Bourse Exposition rooms are in condition it is more than likely that H. K. Mulford & Co. will have a fine display located there.

#### BOX AND CARTAGE CHARGES UNPOPULAR.

The boxing and cartage scheme remains in *status quo ante*, and there is likely nothing will be done in this matter for some time. Among the dealers in this city it is thought that the plan will not succeed, as there is a general disposition to make no charge for either boxing or delivering goods. The committee, however, which has this matter in charge is trying to get the consent of all the trade to enter into the scheme, but as their first efforts were not successful it is thought that they will not succeed in their further endeavors.

#### HOWARD FRENCH ILL.

Howard French, one of the members of the Philadelphia College of Pharmacy, has had a severe attack of the gripe, and as soon as he is able to be around work is to be begun on the new students' reading room at the college. This room was decided upon some time ago, as it was thought that it would keep the boys off the street and do away with trouble, which has been of frequent occurrence in front of the building. It is the intention of the faculty to make an entrance to the reading room through the actuary's office, so that the actuary and his assistant can keep an eye on the room.

For some years past it has been the custom for the senior class of the Philadelphia College of Pharmacy to take an annual trip to New York and visit some of the leading manufacturing drug houses there, but it is understood that there will be no visit this year, although some attempt was made to reorganize a trip shortly before Christmas. It is rumored that the reason for the failure is that some of the houses that were visited last year were not anxious to have the class call on them again, as it is said that one of the chemists of one of the leading firms

in New York was with the boys last year and saw a great many things that he otherwise would not have seen.

#### MUNYON GOING TO EUROPE.

The marvelous growth and great success of the Munyon Homoeopathic Remedy Company is an object lesson well worth studying. This company have been in existence only four years. They launched into a business which seemed already overcrowded, where the sharpest competition had to be met, yet we are told that this company earned last year over a quarter of a million dollars, and that the remedies are used in every civilized country.

Mr. Munyon says he attributes his success to two reasons. First, making sure that his remedies were just what he claimed for them; second, telling the people the truth about them by liberal newspaper advertising.

"There have been times in the history of this company," says Mr. Munyon, "when prospects looked pretty black, but I summoned the great army of newspapers to my aid. I told the people about my remedies. I asked them to believe me. I kept everlastingly telling the truth, and to-day these remedies can be found in every town in America, and the demand is so great from foreign countries that I leave in a few days to open branch establishments in London, Paris and Berlin."

#### FIRE AT KUMMERLE'S

A fire broke out last Sunday in the three story mill on Charlotte street, below Girard avenue, owned and occupied by William Kummerle, Jr., manufacturer of druggists' sundries. Two alarms were sent out by the fire department as a precaution, owing to the belief that the place contained explosives. The flames were subdued in the course of an hour, but in the meantime they extended to a stable in the rear owned and occupied by Marion Maynes. There were a dozen horses in the stable when the fire was first discovered, and all were saved by the Tenth District police. Mr. Kummerle's loss is \$3500, and the owner of the stable estimates her loss at \$2000.

#### News of the Fortnight.

W. R. Warner is attending the first annual convention of the National Association of Manufacturers in Chicago.

Van Dyke Bros. have established a branch drug store at Forty-seventh and Woodland avenue.

Dr. A. P. Charlton & Co. have succeeded A. A. Weber in the drug business at Seventh and Snyder avenue.

A new drug store has been established at the corner of Twenty-seventh and Oakford streets by A. LaDow.

E. A. Perrenot has opened a branch store on Lancaster avenue, below Thirtieth street.

George M. Beringer has been elected president of the Philadelphia Botanical Club.

Dr. J. Louis D. Morison has sold his drug store at the northeast corner of Tenth and Cumberland streets to Charles Kohler.

The Morris & Kaufman Pharmacy, Fifth and Lombard streets, will, until

further notice, be known as the European Pharmaceutical Company.

J. W. W. Amsley, having purchased the store of Dr. W. L. Mathews, 2800 Grays Ferry road, will continue the business there under the management of Mr. Slifer.

Franklin C. Burk of Flemington, N. J., will soon pay his annual visit to this city. Mr. Burk has been looking forward to this trip with considerable interest, as has also the trade in this city, as he generally lays in a large supply of goods.

The drug store at Twentieth and Cherry streets, which has been conducted by Harry B. Lippincott for a number of years, has changed hands, and in future will be operated by Charles Leedom, who has another store at 1408 Filbert street.

Mr. De Kieffer has given up his store at Twenty-second and Market streets, and has accepted a position with the Davis Publishing Company. The store will in the future be conducted by Robert W. Maris.

The drug store at Twenty-fifth and Jefferson streets has been purchased from Dr. James S. Williamson by Frank G. Mumma. The new owner is well known in the vicinity, for he frequently clerked for Eberly Bros., at Twenty-fifth and Oxford streets.

Mr. Hoffecker of the firm of Hoffecker & Klinger, 1506 Ridge avenue, has bought out the drug store formerly conducted by Thomas A. Walker, 8108 Ridge avenue. Mr. Hoffecker will reside at his new store and will also retain his interest in the other one.

Rush P. Marshall, whose drug store is located at the southeast corner of Sixteenth and Race streets, has decided to take a trip to California for his health. He has been a sufferer for some time, and hopes to derive much benefit from this trip.

J. F. Hayes, who for a number of years conducted the St. George Pharmacy, at the southwest corner of Broad and Walnut streets, has bought out the store at the northeast corner of Thirteenth and Walnut streets, formerly owned by John Ogden. It is understood that Mr. Ogden is now traveling for a well known house.

Miss Weston, a student of the Philadelphia College of Pharmacy, entertained a number of her friends with a whist party on December 31. Among those present were: Miss Johnson, Miss Azman, Miss Short, Miss Shine, Professor Hahn, Miss Houghton, Mr. Spotts, Mr. Genz, Mr. Watson, Mr. Griffith, Mr. Graham and Mr. Weston.

On January 28 the fourth social meeting of the Alumni Association of the Philadelphia College of Pharmacy was held. Dr. John M. Macfarlane, professor of botany in the University of Pennsylvania, delivered an entertaining address on "Botanical Gardens and Their Value." Besides this there was music by the Zeta Phi orchestra and recitations by Miss Peirce and her pupils.

A. T. Pollard, the well known druggist who has for many years conducted a drug store at Eleventh and Locust streets, is making some alterations in his store. For some time past he has been cramped for want of room and he has torn down the partition and thrown the two rooms into one; besides this, he has renovated the interior as well as the exterior of the building.

### Pharmaceutical Meeting of the Philadelphia College.

At the meeting held Tuesday, January 21, papers were read as follows: "Kola and Kolanin," by F. B. Kilmer (illustrated by photographs); "The Influence of Certain Medicinal Compounds on the Character of the Urine," by F. W. Hausmann; "A Comparison of the More Recent Methods for the Assay of the Cinchona Alkaloids," by L. F. Kebler.

Mr. Kilmer's paper was quite exhaustive, describing the histology and pharmacology of the kola nut, which is attracting so much attention at present. He referred to his experiments in the determination of kolanin, which, he said, was an amorphous body and impossible to obtain in a crystalline condition. Respecting the difference between the West Indian and the African kola, it was shown that the latter really contained less of the active principles than the former. The African nuts are gathered less carefully, and often decompose before they leave the hands of the natives, and glucosides and alkaloids are consequently absent. Mr. Kilmer's paper elicited considerable discussion, and he was awarded the thanks of the meeting.

Mr. Hausmann detailed the action of certain drugs on the urine. Among those which exerted specific effect he instanced chloroform, chloral, turpentine, copaiba, acetanilid, glucose, etc. The paper indicated close research on the part of the author, and, as the chairman remarked, work of this character was likely to produce valuable results in view of the large consumption of these drugs. The author mentioned in support of this that he knew of one order which had been placed recently with a manufacturing chemist for 10,000 pounds of acetanilid and 1,000 pounds of caffeine.

L. F. Kebler's paper was as valuable as it was interesting. It comprised a critical review of the more recent methods for the assay of the cinchona barks and a comparison of their value.

## OHIO.

CINCINNATI, January 20, 1896. — The Ohio State Board of Pharmacy met in this city on the 15th inst., in the Ohio Mechanics' Institute Building, at Sixth and Vine streets. The Board at present consists of Charles Krone of Hamilton, W. R. Ogier, secretary, Columbus; Albert Meininger, Cincinnati; George W. Voss, Cleveland, and Charles E. Ink of Columbiana. There were 109 applicants for pharmacists and 89 for assistants' places. The examination consisted of 100 questions in pharmacy, chemistry, materia medica, poisons and antidotes and prescription work. In addition to the above examination three years' practical experience are necessary for the applicants for pharmacists to have had; two years for those desiring certificates as assistants.

### COLLEGE APPLICANTS.

The Cincinnati College of Pharmacy furnishes many applicants every year, and since the board's formation, in 1884, a large number of finished pharmacists have been turned out. There are three examinations provided for by law every year—one in Cleveland, one in Columbus and one here but usually a special meeting is called in Toledo and one later in Columbus. Among the aspiring druggists to be last Tuesday there was but one

representative of the gentler sex—Miss Mary N. White of Springboro. The young lady is rather modest, and asks only to be an assistant and not a full fledged pharmacist.

### THOSE EXAMINED.

The report of the Board of Examiners will be made in Columbus in about two weeks at a supplementary meeting. Those who were examined were: Grant Hemphill, H. J. Luecke, Cincinnati; Charles P. Champney, Terrysburg; J. C. Cope, Bloomingdale; R. R. Christian, Kent; C. W. Miller, Lima; B. F. Goddard, Lynchburg; F. W. Conradi, Zanesville; W. O. Lemasters, Scio; C. C. Seeborn, Portsmouth; J. Frank Hinton, Troy; B. C. Jones, Sharonville; N. T. Alford, Leipsic; S. L. Burke, Lowellville; E. B. Dobell, Columbus; J. W. Birk, Bucyrus; Gordon P. Lindsay, Cincinnati; E. E. Harrold, Columbus; Carl A. Ploth, Geo. A. Theobald, Ed. G. Dabney, Elmer Evans, Cincinnati; A. F. Schickner, Covington; Geo. C. Francisco, Dayton; Alfred G. Knost, St. Mary; H. S. Robinson, Steubenville; A. B. Errett, Mt. Vernon; L. A. Eckert, Maumee; C. D. Taylor, Mt. Vernon; E. L. Dye, Columbus Grove; E. A. Williams, Wauseon; C. A. Studebaker, West Manchester; J. F. Gast, Cincinnati; R. S. Applegate, Oxford; L. E. Culbertson, Cambria, Mich; L. A. Lutterman, G. H. Meier, Cincinnati; Nicholas Blank, Newport; John H. Messerner, W. O. Lehr, Carthage; A. W. Katznelson, Ralph Freiberg, Ralph W. Goodall, Cincinnati; Wm. A. Mueller, Cheviot; Chas. Asman, Cincinnati; E. M. Crawford, California, Washington County, Pa.; H. W. Heberle, Cincinnati; Chas. Rowland, Lodi; Carl C. Markt, H. W. Huber, Hamilton; J. A. Haas, J. H. Dornhegger, Geo. Huese, Cincinnati; J. E. Gasson, Versailles; H. B. Ratterman, Cincinnati; Gustav Falk, Winton Place; Jacob Bonner, Hamilton; C. J. Froendhoff, Dayton; Wm. F. Ford, Cincinnati; L. W. Dougherty, Clarence H. Balch, Columbus; Benj. A. Noertker, Newport; W. E. Salt, Jos. E. Goodwin, Wm. B. Wilke, Cincinnati; A. E. Wganer, Marietta; E. A. Sturtebeck, B. J. A. Sturtebeck, Covington; E. H. Schwarz, Reading; Charles Katsmann, Cincinnati; Charles D. Stukey, Sugar Grove; O. A. Hoffman, Cincinnati; C. E. Foraker, Clarksburg; G. Danziger, H. S. Hollenbeck, W. L. Wuest, W. A. Roth, Cincinnati; John W. Tuttle, Fremont; Ed. Meyer, J. H. Cline, Cincinnati; F. C. Toedtman, Cleveland; E. F. Kolbee, Robt. Wodtke, Jr., Cincinnati; E. C. McCullough, Lawrenceburg, Ind.; M. J. Ullman, Geo. W. Fite, Cincinnati; E. E. Southard, Columbus; Grant Hoover, Gratis; J. M. Greis, Dayton; Andrew Panger, Cincinnati; E. A. Kauffmann, Newport, Ky.; J. Meek, Prairie Depot; A. P. Stockes, Cincinnati; W. O. May, Piqua; W. F. Schreiner, Middleport; Jos. B. Stammel, A. Beckman, Cincinnati; J. C. Harper, Hamilton; Fred Weismann, Louis Graf, Cincinnati; J. A. Blackman, Toledo; Jos. Linke, M. Hornbach, Cincinnati; Wm. Moss, Cleveland; Conrad Waldvogel, Cincinnati.

### ASSISTANTS' CERTIFICATES.

Those who applied for assistants' certificates were: H. A. Dukeman, Jr., Elyria; H. A. Crandall, Geneva; P. C. Chapman, Painsville; F. C. Schwartz, J. Burton Hoesly and H. C. Coleman, Cincinnati; H. M. Faulkner, Troy; Wm. Goldcamp, Cincinnati; Wm. Kerans, Norwood; Arthur Schmidt, Cincinnati;

Geo. V. Losh, Blanchester; Forest D. Christian, J. B. Alick and Geo. C. Kiefer, Cincinnati; A. H. McIntire, Springfield; Christian Schmider, Wm. Schmidt, Frank J. Mentjes, Isadore Blumenthal and Chas. L. Wiebold, Cincinnati; Wm. Schneider, Cumminsville; Chas. B. Smith, Cincinnati; Chas. Weissman, Hamilton; Reuben E. Schenk, W. R. Greiss and Robert M. Smith, Cincinnati; Roy S. Davis, Middleport; Ed Fanning and H. J. Spechthold, Cincinnati; Wm. D. Lang, Manchester.

### LETTING UP ON THE DRUGGISTS.

The Food and Dairy Commission for this district has not molested the druggists during the last fortnight. Commission merchants and others, however, have been more or less disturbed over a crusade against bad eggs. Commissioner Luebbing and his men claim that there is no end of bad hen fruit in the local market, and a number of arrests of dealers will doubtless be made in the near future. The fine for selling bad eggs is \$50 and 20 days' imprisonment.

### Heard Around Town.

Billy Hale has a sprained ankle.

N. Ashley Lloyd is attending a meeting of wholesale druggists in Chicago.

Hon. Sam J. Hale now represents Avondale in the Board of Education. He'll make a good member, too.

Dr. Louis W. Sauer, the clever pharmacist at Baymiller and Central avenue, went to Columbus with the Young Men's Blaine Club.

D. Lincoln Mussey, a well known young physician, was married to a daughter of Mr. C. P. Calvert, the well known wholesale druggist a few days ago.

J. S. Shepard, Columbus, has added to his already attractive store a large and beautiful new soda fountain. James W. Tufts, Boston, furnishes.

Nearly 800 indictments have been found against Hendricks County, Indiana, pharmacists for selling liquor without a proper license, as required by law.

The wholesale drug house of Singer & Wheeler at Peoria, Ill., is temporarily closed on account of a quarrel among two of the stockholders. The concern did a business of about \$1,000,000 annually.

Matt Yorston, the Central avenue pharmacist, is one of the most enthusiastic men about new books that can be found in the city. He thinks so well of the *Enquirer Almanac* that he allows his clerks to take orders for the great little book.

E. J. Potter, a druggist of Sherwood, Ohio, is the defendant in an action for criminal libel brought by Rev. J. W. Wingate, pastor of the Methodist church. Mrs. Johnson, Potter's daughter, was a member of the Methodist church some time ago, and sold the pastor a book which remained in Potter's store until paid for. Mrs. Johnson withdrew from the church owing to a quarrel with the minister. Recently Mr. Potter placed the book in his window with a card attached which set forth that the minister had refused to pay for the book because Mrs. Johnson had left the church. This card caused much excitement in the small village and the people were horrified. The minister caused the arrest of Mr. Potter on charge of criminal libel, and the case will be heard next Thursday.

George Kylius has the largest oblong mirror in town in his West End pharmacy, in front of the prescription case.

#### A Fine Sandusky Store.

One does not often see a more complete stock of drugs and chemicals than is carried by Geo. J. Schade at the Park Pharmacy, Sandusky. The store and its appurtenances are modern in every sense of the word. The purchaser is impressed that the proprietor's aim is to strive to excel, and that he has succeeded is evident to the most casual observer. At the rear of the store Mr. Schade has fitted up a very comfortable office, which is used as a lounging and reading room by the physicians who constantly haunt this model pharmacy. As there is at present no hospital in the city; this room is used as a temporary hospital in cases of accidents occurring in that locality. Here are to be found all the standard works on pharmacy, materia medica and also the AMERICAN DRUGGIST, neatly bound. This latter volume, Mr. Schade tells us, is his right bower. Mr. Schade is a firm believer in street car advertising, and says the "Business Hints" in the AMERICAN DRUGGIST helps him to make up his advertising copy. He has just returned from a visit to New Orleans and vicinity, and comes back to business with redoubled energy and vigor.

### MICHIGAN.

DETROIT, January 19, 1896.—The reaction which usually follows the holiday season struck this vicinity with unusual force this year. Jobbers say that it never was quite so dull before. The chief characteristic of it is the hard collections. It is said to be as hard as pulling teeth to get a retailer to cough up his dues. It is said that during this month only a few of the big down town stores did a satisfactory business. The suburban dealers were not in it.

#### DR. SAVIN BETTER.

Dr. C. T. Savin, who recently went on the road for Parke, Davis & Co., was last reported as being at Minneapolis. There he had a second operation performed for appendicitis, which is said to be a final one. Dr. Savin is now reported to be on the road to health, much to the delight of his many friends here. Since he has left the profession of saving sinners, Dr. Savin is said to have been a pronounced success at soliciting orders, although the well known reputation of the firm for whom he travels makes the road an easy one; their compounds are known all over the country for their general excellence.

Among the representatives of outside houses who recently visited the trade here were: L. R. Dronberger, with Thurston & Bradich, January 17; P. F. Wisman, with the Armstrong Cork Company, January 18; H. C. Killman, with the W. S. M. Chemical Company, January 14; Frederick B. Perry, with Powers & Weightman. They all reported business a bit slow for this time of the year.

#### FREE ALCOHOL IN THE COURTS.

Parke, Davis & Co., Nelson Baker & Co. and other large manufacturing drug concerns in Detroit have sent letters to Senator McMillan, urging an effort to have the free alcohol claims pending

the Department of Justice disposed of as soon as possible. They also desire to have the Assistant Attorney-General substitute the Dunlap case instead of the Sharp and Doehn case as the test case. The proof in the Dunlap case is far less complicated, and since it pertains merely to whether the alcohol used in making hats is liable to rebate. This is the only question to be decided. Assistant Attorney-General Dodge has already placed the responsibility for the early trial upon the Treasury Department. In reply to an inquiry as to how long it would be before the case would come up for trial in the absence of a request for their expedition from the Secretary of the Treasury, he states that it might not be reached for several months and possibly not for a year. While this is regarded as a liberal estimate, in view of the docket of the court, no one seriously believes that these important cases will be forced to wait their turn with the thousands of unimportant actions involving only the interests or advantage of a few individuals. Some of the most important trade organizations in the country, it is said, are preparing formal appeals to Congress and the departments to settle the question of free alcohol one way or the other within the shortest possible space of time. These appeals are to be made irrespective of the bias of individuals with regard to the controversy, and will be based solely upon the general desire to restore a stable basis to the alcohol trade in order that manufacturers may know exactly what to count on in the future.

#### MEETING OF THE MICHIGAN BOARD.

The Michigan State Board of Pharmacy held a meeting in Detroit on Tuesday and Wednesday, January 7 and 8. Sixty candidates took the usual examination and the following succeeded in getting through: William C. Burt, Sault Ste. Marie, Ont.; Walter W. Briggs, Vicksburg; Charles R. Carson, Fred. H. Holmes, C. J. F. Schroeder, F. D. Wiseman, A. M. Edwards, Detroit; O. E. Foster, Chelsea; S. S. Ludlum, Harrisville; C. M. Bunn, C. D. Poel, Kalamazoo; A. E. Stanley, Milford; H. H. Waters, Monroe; James G. White, Owosso. Registered assistants: G. A. McDonald, Charles R. Rae, Detroit. By resolution of the Board at this meeting, candidates for registered pharmacists will hereafter be required to have an average of 70 per cent. and assistants an average of 50 per cent. The next meeting of the Board will be held at Grand Rapids on Tuesday and Wednesday, March 3 and 4. Some of those who did not succeed in passing the examination here have a kick coming, and say that the Michigan Board, instead of discouraging counter prescribing, actually encourage it by requiring candidates to have a knowledge of therapeutics. It is alleged that a number of questions were asked, all having a similar effect. Among them were, what effect has absolute alcohol when applied to the skin? and what foods would you give to a diabetic? It is insisted that these questions are not fair when propounded to a budding pharmacist. It is alleged that the Board will shortly require a knowledge of electro-therapeutics as well.

#### IN FAVOR OF THE MERZ COMPANY.

On the 7th inst. Judge Severens of the United States Circuit Court of Appeals announced the opinion of the court in the case of Robert J. McCutcheon and

others representing the Capsule Trust vs. The Merz Capsule Company of Detroit, Mich. The decision of the Circuit Court in favor of the Merz Company was affirmed. The trust sued Merz for breach of contract in withdrawing from the Capsule Trust of which McCutcheon is the founder. Merz after joining the trust discovered that the combination was contrary to the anti-trust laws of Michigan and withdrew. McCutcheon then brought suit. Judge Severens of the Circuit Court at Detroit sustained Merz declaring in a decision rendered several months ago that under the Michigan laws Merz could join no organization which had for its object the arbitrary advance of the price of any article controlled by this.

The trust proposed to advance the price of capsules and consequently came within the law. The Merz Company having entered the trust without cognizance of this law took a proper course in withdrawing, on legal advice, and could not be held liable for the breach of contract which it had no right under the laws of the State in which it operated. The decision was rendered here by the same judge who delivered an opinion in Detroit and contained no new points. The previous was upheld in every particular. Having failed in this appeal McCutcheon has nothing to do but accept the judgment of this court as final.

#### Among the Trade.

James C. Fuller, traveling salesman for F. Ingram & Co. of Detroit, is doing the Michigan trade.

H. Heffelbower, formerly of Detroit, has opened a well appointed drug store in the Clarion Block, Lapeer, Mich.

George J. Menold of Coldwater, Mich., has removed his drug stock to Douglas, Mich.

Charles Totzke last week took charge of the Fabry drug store, at Benton Harbor, Mich.

George R. Beardsell of the firm of Beardsell & Plympto, grocers and druggists, at Hudson, Mich., recently died.

Burglars last week broke into J. W. Arm's drug store at Gaines, Mich., and stole all his change.

Burglars last week entered Hull's drug store at Vermontville, Mich., and secured \$10 in change.

B. W. Ellison of Alma, Mich., has sold his stock of patent medicines to J. A. Bassett, who has removed the same to Cadillac, Mich.

P. A. Reardon, who has for several years been clerking in Dr. F. D. Smith's drug store, at Muskegon, Mich., has purchased a stock at Holton, Mich.

C. H. Hinman, representing the Hazelton & Perkins Drug Company of Grand Rapids, Mich., recently did the northern part of the lower peninsula.

The Young drug store, at Olio, Mich., recently owned by A. Kellogg, formerly of Fenton, Mich., was last week sold to E. B. Wightman.

Charles E. McCauley, a well-known pharmacist in Peck's drug store, at Grand Rapids, Mich., was recently married to Miss Maude E. Bradfield.

The Hazelton & Perkins Drug Company, at Grand Rapids, Mich., recently gave 20 of their employees a complimentary dinner at the Livingston Hotel.

Fire last week did \$5,000 worth of damage to the drug store of J. M. Bittman at Saginaw, Mich.; insurance, \$3,200.

Daniel Sullivan, postmaster and druggist, at Standish, was recently married to Maude Bradley at West Bay City, Mich.

Louis Ruchty, Detroit, Mich., has bought from James W. Tufts, Boston, a very handsome metal silver plated counter apparatus.

The annual report of the Merz Capsule Company was filed last week, as follows: Capital stock, \$10,000, all paid in; personal estate, \$25,020.71; debts, \$11,658.79; credits, \$5,565.55.

Dan Robertson, for many years head clerk in the grocery department of Marks & Franks' store at Holly, Mich., is now in charge of H. M. Church's drug and book store.

C. N. Cordary, representing W. Buedingen & Sons Company, was recently in this city. He covers Ohio, Indiana and Michigan for the firm and reports business in his line as excellent.

Nelson Baker & Co. have just issued a new 208-page catalogue which is a record breaker for articles of its kind. The book has an embossed cover and is certainly a credit to the firm and the trade.

James Gary, of Albion, Mich., has purchased the drug stock formerly owned by him of S. N. Osborn, and has removed the same to the old post office building.

F. M. Alsodorf, the druggist, at Lansing, Mich., has placed a large marble soda fountain in his store, which is said to be one of the finest in the State outside of Detroit.

R. A. Abbott, the Terrace street druggist, at Muskegon, Mich., is reported as being seriously ill and not expected to live. He has an attack of nervous prostration.

The new firm of Hall Bros., pharmacists, at Kalamazoo, Mich., contains two young hustlers in the shape of Ben Whitmore and Fred Childs. Both have worked their way into the profession in the face of considerable opposition.

S. E. Watt, the druggist at Traverse City, Mich., is an amateur photographer also, and last summer took some elegant views of the scenery in the Grand Traverse region, which have been converted into handsome calendars.

The junior pharmacists at the University of Michigan recently elected officers as follows: President, N. Boggess of West Virginia; vice-president, P. Schaupner of Arkansas; secretary, Miss E. A. Batchelder of Minnesota, and treasurer, Miss A. Rich of Michigan.

Henry C. King, druggist at Alpena, Mich., died last week at Oscoda, Mich. The deceased had been a resident of Oscoda for 20 years and about a year ago purchased the drug stock of Dougald McDonald, which was placed in charge of G. F. Perkins.

Harry L. C. Hall, for more than ten years in charge of the city department of the Hazelton & Perkins Drug Company, Grand Rapids, Mich., has entered the employ of Williams, Davis, Brooks & Co. of Detroit. Harry B. Fairchild takes his place with the Grand Rapids firm.

George O'Neil of Nelson, Baker & Co.'s traveling staff, recently sent in a \$4,000 order from one of the government hospitals in Mexico. The invoice covers 18 typewritten pages of cap paper, and the company are willing to take chances on that number being an unlucky one.

Charles Elder, formerly a well-known druggist at Portland, Mich., and a member of Elder Brothers, tried to commit suicide at Lansing, Mich., last week by taking laudanum. Recently his wife filed a bill of divorce and he was despondent.

Fred. Burn, the well-known and popular pharmacist at Bay City, Mich., who has been associated with the firm of E. Von Hermann & Co. for ten years, has purchased the drug store of T. W. Davidson, opposite the Frazer House, 105 Center avenue. A new stock has been purchased.

W. C. Church, with Nelson Baker & Co. of Detroit, recently returned from a good business trip through Ohio. It is alleged that this was his last flyer on the road as a bachelor. It is currently reported that one of his 50 sweethearts has captured him for sure, and invitations are expected shortly.

Edwin W. Clark, formerly in the drug business at Amsterdam, N. Y., died last week at Ann Arbor, Mich. He was a graduate of the University of Michigan, after having completed a course in pharmacy in New York City. In 1885 he married Miss Elizabeth Sherman, who survives him, besides three children. He was 88 years of age.

The H. H. Stafford Drug Company, at Marquette, Mich., is no longer in existence and in its place has come the Stafford Drug Company, with E. O. Stafford as sole owner and manager. The change was made imperative by the continued illness of H. H. Stafford, who is at present in Southern California trying to improve his health. The company began the new year with a complete stock.

It is currently reported that V. R. Conway, who recently left Sault Ste. Marie, will return and re-engage in the drug business there next spring. It is said that Messrs. Conway and Rudel will take charge of the present business of Conway & Co., and that S. Zeller, the other member of the firm, will open a well-equipped pharmacy at the corner of Ashmun street and Spruce avenue.

The death of Mrs. Nancy Backus took place recently at Marine City, Mich. She was the widow of G. W. Backus, who died some 20 years ago. He conducted a drug store at Marine City, and since then she had conducted it, with the assistance of one clerk. She succeeded in accumulating a nice property in the business, and had just erected a new brick block, which she intended to occupy.

Murdo McDonald, who has been engaged in the drug business in the Scriven Block at St. Johns, Mich., for some time, last week gave a chattel mortgage to John Scriven and the St. Johns National Bank for \$1,800. Later another was given to Williams, Davis, Brooks & Co. of Detroit. The store was closed by the sheriff on the first mortgage, but it is thought that an adjustment of affairs may occur which will let him continue.

Charles Wright of Charles Wright & Co., manufacturing chemists, recently received a letter from a Kansas City firm

written on a curious letter head. It bore the picture of a brig under full sail, and alongside it was the following business card: "The 'Ludell' scow set sail December 16, 1880, with a cargo of hardware and drugs, without a God, ghost or devil on whom to depend, but trusting in hard cash and friendship."

The Detroit Paint, Oil and Varnish Club is an organization for the purpose of business and social pleasures. The members recently met and had a banquet at the Hotel St. Clair. The following officers were elected: W. P. Fuller, president; W. L. Daves, vice-president; William Boydell, treasurer; Thomas Neal, secretary; William Reid, F. H. Rogers and S. E. Pittmann, directors. William Stirdion, John Richards, John Schroeder, Norman Bell, J. J. Kaighen, Frank Boydell and L. E. Briggs.

Frank E. Allen of Laingsburg, Mich., was arrested last week at the instance of Dr. Scott of that village, charging him with having compounded and sold drugs without a certificate from the State Board of Pharmacy. Attorney Ewing of Grand Rapids is prosecuting the case. He says this fracture of the Michigan law must stop and promises that other arrests will shortly follow. It will be remembered that he recently stirred things up at Detroit and as a result the atmosphere in the trade there has been much clarified.

The Upjohn Pill & Granule Company at Kalamazoo, Mich., last week made a remarkably large shipment of pills. They shipped about 7000 pounds, or about 8½ tons, to one firm. During the same week a large order was shipped to Japan and a \$1000 order is on the tapis for the Chilean army. They have price-lists published for the English, Canadian, Spanish, American, German and Arabic trades. The company also keep correspondents to cover all branches of the foreign trade in the New York office, of which F. L. Upjohn, formerly of Kalamazoo, is the manager.

The Detroit pharmaceutical establishments were visited recently by Dr. P. J. Ellis of Sidney, New South Wales, Australia, who represents one of the largest drug houses in that part of the world in a scientific capacity. Dr. Ellis has recently spent some time in Japan and Korea, and was in the latter country at the time of the riots. He does not believe that the queen of Korea was killed by the Japanese, but thinks she was spirited away and hidden by them. He inspected the gold fields of that country, and says they are very valuable, and that the American syndicate that has obtained a franchise to mine them will strike it rich.

The annual meeting of the Upjohn Pill & Granule Company was held at Kalamazoo. The following directors were re-elected: Dr. W. E. Upjohn, Dr. J. T. Upjohn, F. L. Upjohn, Dr. H. B. Osborne, J. W. Osborn, I. A. Ransom and E. A. Crane. Dr. Edward Ames was elected to the place on the Board made vacant by the death of John W. Gilmore. The Board of Directors organized by electing the following officers: President, Dr. W. E. Upjohn; vice-president, Dr. J. T. Upjohn; treasurer, F. L. Upjohn.

Herman G. Watz has sold his drug store at Saginaw, Mich., located at the corner of Court street and Oakly, to Fred. A. Richter and E. C. W. Richter, who will do business under the firm name of Richter Bros. Watz established



the business just six years ago. Both of the new proprietors are experienced pharmacists. Fred. Richter was with J. M. Bittman for three years, and during the past two years has been in the employ of his uncle, Louis J. Richter, on Gratiot street. Emil Richter learned the business with Mr. Watz. He was also in the employ of A. E. Tomlinson, and for the past two years has been with the Eberbach Drug & Chemical Company, Ann Arbor, Mich.

## ILLINOIS.

CHICAGO, January 28.—Many of the retail druggists who claim to have been persecuted by the December grand jury met at A. C. Musselwhite's drug store, 50 Clark street, a few days ago and resolved to fight the indictments. There were 25 druggists present, and many more sent word of their indorsement of the "combination for defense" idea. Another meeting will be held soon, when an assessment of \$25 to \$100 will be made on the 60 druggists back of the movement to carry the cases to the Supreme Court.

### PETER VAN SCHAAK'S STORY.

Peter Van Schaack, senior member of the drug house of Peter Van Schaack & Sons, has been variously quoted and misrepresented in the matter of the recent grand jury blackmailing stories.

To a reporter Mr. Van Schaack gave his opinion of the men—"rascals and thieves," he calls them—who, under the guise of public investigators and upholders of the law, levied blackmail upon the unfortunates who came into the jurors' power through their own negligence or corrupt practices. Mr. Van Schaack prefaced his remarks with the statement that the December grand jury was the most corrupt body Chicago has ever been cursed with. He said he was anxious to aid the Civic Federation or any other investigating body in running down those who broke their trust. He was asked to tell what he knew of the sandbagging methods of the jury.

"The first intimation I had of fraud or blackmail in connection with the indictments," he said, "was when a man whom I did not know and had never seen before called at my office and asked a private talk with me. I granted it, and the man introduced himself as coming from the foreman of the grand jury (he said his name was Smith), which was then in session. He represented himself as a friend of Smith's and was then acting in his behalf. I asked him what he had come to me for. He hesitated awhile and then replied that over 60 druggists were charged with selling poison, principally morphine, at retail, without exhibiting a certificate and registering the sale. I asked what that had to do with me, and he replied that my firm was among the number who were charged with violating the law.

"I told him that I would give \$500 to any charity he might name if he or any one else could show that my firm had sold any morphine, except in an original wholesale bottle as put up by the manufacturers, and by them duly marked 'Poison.' I further said to him that ours was a strictly jobbing drug house, and as jobbers we were in no way amenable to the law which he claimed had been violated. That law referred solely to pharmacists or retail druggists as the title showed.

"In reply to this the man said it

would make no difference to the grand jury, and that I would get a lot of unpleasant notoriety. Besides, he said, it would cost me \$300 or \$400 to defend the charge when it came into court. My business would be interrupted and I would be put to much annoyance by having to attend court. To avoid this he said I could 'arrange' with the grand jury. He claimed he was authorized to arrange a meeting between me and the foreman of the grand jury if I would promise him I would pay him \$250. There would be no trouble about the payment of the money. I need not pay the \$250 until after the jury was dismissed, and I had found that my firm had not been indicted. He explained that he had been fixing it that way with several other druggists.

"I was overwhelmed with surprise, but let him finish talking. When he had done I told him in forcible language that I had \$500 to fight such an outrage, but not one cent to bribe a jury.

"Why," he said, "there's no use fighting it. Others are paying what is asked and you will find it cheaper in the end to do the same."

"Seeing that I was angry, he continued, 'Well, think it over and I'll come in to-morrow and see if you haven't changed your mind.'

"I felt like running the scoundrel through the breast with an old war saber of Sitting Bull's which I had on my desk, but I restrained myself and decided to trap him the next day when he came in. To my sorrow he did not come back. He probably had concluded there was no 'graft' in me. I think I can recognize the man if I ever see him again. He was about 5 feet 8 inches in height and had sandy hair and eyebrows. His mouth and eyes were those of a villain. He was a typical representative of the pot-house politician."

Cornelius Van Schaack, one of the firm, was the man whom Foreman Smith spoke to about the Van Schaack indictment. Smith's words were:

"That indictment can't be reconsidered for \$250."

### Chicago News Notes.

J. A. Hackings has opened a new drug store at 330 North avenue.

J. A. Mahaffy has opened a new store at the corner of Stoney Island avenue and Ninety-third street.

W. H. Kelly, who is about to open a new drug store at Marshalltown, Iowa, was here last week purchasing his stock and fixtures.

The Julien Pharmacy, Chicago, has been incorporated with a capital of \$10,000 by Julius Wahl, B. Meuser and W. M. Coulter.

The drug store in the Champlain Building, corner State and Madison streets, has been sold to C. Merz by F. Schrocter, the former proprietor.

The Sanative Medicine Company, Chicago, have been incorporated by Thomas Blaine, David Lawson and Robert C. Bennett, with a capital stock of \$2,500.

A. R. Lewis, Western representative of Johnson & Johnson, left here on the 6th for the Pacific coast on a business trip. Mr. Lewis expects to be absent for about two months.

Horace R. Allen, E. J. Sutfin, Alvin J. Blakely, J. A. Garner, J. A. Minturn and Matthew S. Baldwin are the incorpora-

tors of the Allen National Medicine Company, with a capital stock of \$2,500.

The Onyx Soda Fountain Company, Chicago, have been incorporated with a capital stock of \$10,000 by Michael D. Flavin, Ira C. Wood and Howard M. Carter.

The entire outfit of bottles and shelf ware for the new store of the Gross & Delbridge Company, and that of Buck & Lohman, were furnished by Whittall, Tatum & Co., through their representative, John F. Matthes.

The committee of the trustees of the University of Illinois visited the Chicago College of Pharmacy in connection with the proposed affiliation of the College of Pharmacy with the University, and their report is expected to be made public within a short time.

An assignment was made on the 13th by E. Van Hermann, druggist at the corner of Indiana avenue and Thirty-first street, to William H. Stolte. The amount of the liabilities have not been made known, but the assets are estimated at from \$15,000 to \$20,000.

A. H. Buck, a son of George Buck, who was one of the pioneer druggists of this city, and one of the founders of the well known drug firm of Buck & Rayner, has entered into partnership with N. Lohmann, and will open a pharmacy at the corner of Forty-seventh street and St. Lawrence avenue.

The new factory that the Liquid Carbonic Acid Mfg. Company are erecting at Milwaukee, Wis., will be completed and in running order by the first week in February. The completion of this plant will enable this company to take care of their already large trade in a much better manner than in previous years.

N. Gray Bartlett will remove his drug business from 117 Twenty-second street to the corner of Indiana avenue and Twenty-second street, where a large building is being erected. This is the same location that Mr. Bartlett occupied for many years, and which he was obliged to vacate owing to the removal of the buildings. His return to his old stand has been delayed by litigation in regard to the property.

The slot telephone that has been placed in a great number of drug stores is meeting with considerable favor, and it will be only a question of time, and a short time at that, when all drug stores will be equipped in that manner. The saving of time to the druggist in not having so many people using the telephone for trivial purposes alone is sufficient to recommend it, to say nothing of the improved service.

The subscriptions to the capital stock of the United States Pharmacal Company, which closed on the 15th, amounted to a little over 800 shares out of the 2,000 offered. This amount is divided among 450 retail druggists, the amount of stock that can be held by any one person being limited to five shares. A meeting of the stockholders was held on the 20th, when the election of officers and directors of the company took place.

At the meeting of the State Board of Pharmacy just closed the following passed as registered pharmacists: B. C. Beaumont, Marshall; Jacob Frisch, Springfield; Dennis C. Flanagan, Cairo; B. Grabowicz, Chicago; L. L. Hall, Edgewood; J. Klein, Chicago, and G. C.



Schneider, Kankakee. The next meeting of the board for examination will be held February 11 next, at 173 Thirty-ninth street, Chicago.

Among the new year changes in firms supplying the drug trade is the removal of Charles F. Kade of the firm of Charles F. Kade & Co., manufacturers of druggists' outfits, to Quincy, Ill., where he becomes the manager of the Quincy Show Case Works. His brother, Mr. Otto C. Kade, who was in partnership with him until December, 1894, has re-entered the firm, and will have charge of the business at 216 Lake street, Chicago, where the business will be carried on under the same style as before. Otto C. Kade has been known to the trade for many years as a designer of outfits, and was with the A. H. Revell Mfg. Company for a long time.

George H. Rives, who for the last six years has been in the employment of Messrs. Sharp & Dohme, has established an importers and manufacturers' agency at 193 Randolph street, Chicago. Among the specialties that he will handle is the Springer Torsion Balance, so well known to the trade. He will import and carry in stock a line of fine sponges. The premises at 193 Randolph street are well arranged and are in the heart of the drug trade of the city. Mr. Rives is well known to the trade throughout the West and Northwest, having previous to his connection with Sharp & Dohme traveled in the interests of William R. Warner & Co.

The removal of the Thompson Wild Cherry Phosphate Company from 618 West Lake street to the corner of Washington boulevard and Paulina street, will give that company an opportunity to promptly fill all orders intrusted to them. Their new building has a frontage of 100 feet on Washington boulevard and a depth of 140 feet and is four stories in height, all of which will be occupied by the company for the manufacture of their Wild Cherry Phosphate, which sold so largely last season. There will be no possibility of the delay in shipping goods that they had last season as especial care has been taken in arranging the building that this department has ample space. Already they are booking orders from the jobbing trade from different parts of the country.

## MISSOURI.

St. LOUIS, January 18.—The Missouri Board of Pharmacy met in St. Louis on January 13 and 14 and examined 61 applicants for registration. Of this number the following were successful: Wm. Bartel, J. D. Butler, H. C. Benning, W. Cannady, H. C. Cody, L. Yunker, C. S. Duckworth, O. Ettmueller, R. J. Eckart, O. H. Fischer, J. W. Heitz, R. M. Gerber, C. F. H. Gross, W. F. Germann, A. V. Marquardt, G. B. Murmann, A. M. Pachter, J. T. Poppitz, R. H. Pardee, F. P. Robinson, H. D. Spork, H. Z. Spohn, G. H. Sommers, L. H. Schlenker, G. W. Stiehl, J. M. Swinney, A. C. Stoffer, J. C. Thumser, A. B. Walker, F. L. Whelpley, W. A. Webster of St. Louis, D. R. Comer, Hannibal; J. R. Funk, Fertus; J. F. Mott, Morganfield, Ky.; J. R. Myers, Sedalia; S. McNair, Versailles, and Theo. Runge of St. Charles, Mo. Most of those who passed are senior students of the St. Louis College of Pharmacy. A large number of the juniors tried the examination, but

only two were successful. While most of those who passed registered their address as St. Louis, there are in reality but very few who belong here.

### A SPECIAL EXAMINATION WANTED.

It was expected and hoped by many that the Board would hold a special examination in this city about next April for the benefit of the graduates of the College of Pharmacy. A thorough canvass of the prospective candidates was made, which showed that there would probably not be a sufficient number (outside of those who failed to pass this time and are thus entitled to another trial free of charge) to pay the expenses of the Board. The final decision of the Board was announced several days ago, and every unregistered drug clerk in the city who felt that there was any show at all for him came up last Monday for examination. Dr. Edmonds of Miamme was sick in bed, thus leaving all the work to Mr. Fleischman and Secretary Sennewald. This, with the unusual large number, required an extension of the examinations over two days. The next examination will be held in Kansas City on April 18. There will probably be a large delegation from St. Louis go out at that time.

### NEW DRUG CLERK OFFICERS.

Thursday evening, January 9, will long be remembered by many St. Louis drug clerks as the night of the annual election of officers. In order to bring about a large attendance, as well as to make it a memorable occasion, a banquet was the feature of the occasion. No member was admitted who was in arrears with dues. After supper toasts were responded to by Professors Hemm, Good and Falk, W. C. Bolm, G. J. Meyer, F. W. Sennewald and others. The new officers of the society are as follows: President, Chas. Milne; first vice-president, R. S. Vitt; second vice-president, Geo. Mueller; recording secretary, J. L. Boehm; corresponding secretary, Wm. Baron; treasurer, Chas. Witt; Executive Committee, C. W. Hahn, Al. Harstman and S. G. Snuggs.

### THE FUTURE OF THE SOCIETY.

There is a great deal of speculation among drug clerks as to the future of the society. Many of the older members find their time too much occupied to permit of taking an active interest in the affairs of the society this year. R. S. Vitt, who has contributed most to the success of the organization, is now studying medicine. He wished to retire from the organization, but they insisted upon him accepting office again. His management of the bureau of information did much to bring the society into prominence. J. L. Boehm of 900 Morgan street will now attend to that business.

### READY FOR THE OCCASION.

"Bombastes Fusioro," a burlesque-tragic opera in one act, and 11 actors—all of them druggists, too! No matter what drug store you pass in this city your attention will be attracted by a very large display card, announcing the entertainment of the Alumni of the College of Pharmacy. This is to take place at Liederkrantz Hall, January 28. After the entertainment will be a supper and dancing. The first part of the entertainment will consist of a musical concert by the following: Miss Josie Ludwig, Miss Olga Bredemeyer, Miss Laura Boette

and Louis Flachskamm, Julius Blatner, Max Hauschild and the Harrington Bros. The actors in the tragic opera are: Chas. Lips, G. H. Van Aller, Paul Schneider, L. A. Seitz and Miss Rose Wirthlein; also A. Funke, A. Voepel, A. Mueller, A. Klippel, E. Bernius and E. Eyeremann. From all indications a very large attendance may be expected, and it is safe to say that every druggist who misses this will have something to regret the remainder of the year.

### A BIG DEPARTMENT STORE.

It is the general report among St. Louis druggists that Siegel, Cooper & Co. of Chicago will soon open a large department store on the corner of Fifth and Washington avenue, where Siegel, Hillman & Co. were recently burned out. One of the departments of this store will be a well equipped pharmacy. This is arousing the ire of the downtown pharmacists, but as similar reports have been circulated before, and still we have no department store with a pharmacy, this may also turn out to be newspaper talk.

### STIRRING UP THE STUDENTS.

Over 200 medical students in this city recently received notice from the State Board of Health that they were not qualified to pursue the study of medicine, and should they continue to do so they would not be given recognition by the board of Missouri. This came as a terrible blow to many of the colleges, but is heartily approved of by the profession and the higher grade colleges. Several months ago each college, in response to a demand, rendered the Board of Health a report of each student's preliminary education. Nothing more was heard of this until a few days ago the students received this notice. Pharmacy students are wondering if any such action is likely to be taken by the Board of Pharmacy. This is not possible, as each student on entering either college in this State is required to pass a written examination if unable to show a diploma from some high school or similar credentials. This is even more than the Board of Pharmacy demands, so that the young pill rollers need not expect trouble from that source.

### News Items.

Wm. H. Lemmon starts out on the road in a few days for the well known manufacturers' agent, Mr. Chittendon.

Stephen Kohelnbach of Kohelnbach & Schultz goes to Indiana to take a well earned vacation.

A Dr. Kirsch of East St. Louis is having trouble with the Board of Pharmacy of that State.

Carl Schultz is moving his store from Eighth and Carr streets, over on the south side, to Broadway and Soulard street.

Geo. Waller has changed from the Penny Pharmacy to Klipstim's, Sixteenth and Franklin avenue.

C. J. Heberle, proprietor of the Rose Hill Pharmacy, has just returned from his old home in Germany.

C. W. Tritschler, Grand avenue and Natural Bridge road, is slowly recovering from typhoid fever.

W. R. Schlueter is getting ready to erect a handsome new store building at 5200 North Broadway.

A. R. Troxell, a prominent pharmacist of Cheyenne, Wyo., once a St. Louis drug

clerk, was in the city buying goods and shaking hands with old friends the fore part of the week.

A. D. Horstman has just accepted the position of head clerk at Judge & Dolph's store, at Fourth and Market streets.

Theo. Young, formerly of the firm of Schultz & Young, Tenth and Pine streets, now has charge of the Hecker Pharmacy, Compton and Rutger streets.

A. W. Lang, Osage and Oregon avenue, sold out his stock to various druggists, and has gone back to Illinois, where he will resume his former occupation of farming.

A. A. Land, who sold his store at Nineteenth and Cass avenue a few months ago, has taken charge of the prescription department of Dr. Klie's store, 5100 Broadway.

### The California Board of Pharmacy.

The California State Board of Pharmacy met in regular session, January 8, adjourning January 13.

The following were registered as graduates: W. F. Diesbach, F. G. Lindsay, C. J. Abraham, H. Lippen, S. W. Prewett, J. F. Christopher, E. A. Hazen, J. Von Werthern. As licentiates without examination, R. W. Borthwick, F. Brandesch.

The following applicants passed the licentiate examination: S. Miller, Jr., H. L. Smith, C. H. Colpe, G. W. Lawrence, P. F. McMorris, B. S. Dickhoff, J. J. Freeman, A. Lawrence, R. H. Bowman, E. R. Tait.

The applicants named below passed the assistant examination: C. F. Newman, E. L. Fletcher, E. L. Wegener, W. V. Grimes, J. H. Hughes, G. Lichthardt, W. I. Claves.

The following resolution was passed:

*Resolved*, That we concur in the recommendation of the A. Ph. A. in regard to the preliminary education of candidates presenting themselves before boards of pharmacy for examination.

That the secretary be instructed to notify those whom may offer themselves as licentiate and assistant to present the evidence of their having completed the grammar course in public schools of this State, or in case they have not such evidence that they furnish other evidence to show that they are entitled to enter the high school of this State, in case they have not such credentials, they be examined in reading, writing arithmetic, geography and composition, and in case they fail to pass that examination satisfactorily, they be denied the privilege of taking the regular examinations of the board.

The board will hold a special meeting on April 2, at Los Angeles, probably at the Westminster Hotel. The regular meeting will be held at 118 Fulton street, San Francisco, on April 8, at 10 a m. A few of the answers to the questions asked at the January meeting are appended:

"The Botanical name of German worm seed is *cydonium*."

"*Pulsatilla* is *baptisia tinctoria*; leaves, stems and root used, grows in Central Asia, Europe and Middle Central States of United States."

"*Capsicum*. Botanical name, *C. officinalis*, active principle capsaicin."

"*Triticum*. Botanical name, *herbarium triticum*, part used stems and spears. Medical use, alterative valuable in fevers and rheumatism, dose of fluid extract, 2 to 8 to 5 to 10 drops."

Bees Wax, what is its source? Answer: "Made by domesticated or tame bee." How is white wax obtained? "By melting yellow wax and straining through animal charcoal while hot."

### The Grosvenor & Richards Suit.

A decision has at last been rendered in the suit brought by J. M. Grosvenor to restrain the Grosvenor & Richards Company from the use of the name Grosvenor & Richards.

The text of the decision is appended below:

Supreme Judicial Court. In Equity J. M. Grosvenor, et al. vs. The Grosvenor & Richards Co. et al.

#### DECREE.

In this cause the several defendants therein having appeared and been represented by counsel, it is ordered, adjudged and decreed, the several parties defendant consenting thereto as appeared by the stipulation in writing filed in said cause, that the said parties defendant, their agents and servants, are hereby permanently enjoined from using the name Grosvenor & Richards in the name or style of carrying on business, or as a trade mark, either alone or in combination with other words, and from selling, assigning or transferring to any person or corporation the right so to do; saving, however, to the defendants Grosvenor & Richards Company, the right to use its corporate name in matters of liquidation, and in closing up its business, and also saving to the defendant company and to J. Ellwood Lee Company, purchaser from said company under bill of sale executed December 23, 1896, the right to use the labels and containers of said company now on hand, until May 1st A. D. 1900, but no longer.

By the Court, JOHN NOBLE, Clerk.

January 8, 1898. A true copy.

Attest: C. H. COOPER, Asst. Clerk.

The concern of Grosvenor & Richards was formed about 30 years ago by J. M. Grosvenor and A. D. Richards. It is now nearly ten years ago that J. M. Grosvenor bought out A. D. Richards' interest, and continued business under the name of Grosvenor & Richards. A short time after this the business was put into a corporation, still under the name of Grosvenor & Richards (corporation or incorporated), J. M. Grosvenor owning about three-quarters of the stock. Some five or six years ago he sold out his entire interest and control in the corporation to the minority holders, and retired from the business, retaining Bellocapsic Plasters. At this time J. M. Grosvenor, Jr., also resigned as general manager, and the father and son organized the firm of J. M. Grosvenor & Co. About two years after this the Grosvenor & Richards Company became financially embarrassed, it is said, through outside operations of the stockholders and made a voluntary assignment to trustees, who quite successfully carried on the business over a year, and finally sold out the assets to a syndicate of investors, headed by Mr. Woodruff, of Boston, and Mr. Ferguson, of New York. These purchasers organized in Maine under the name of the Grosvenor & Richards Company. J. M. Grosvenor & Co. contended that while the new company might possibly have the right to make the same class of goods as did the old company, it certainly did not have the right to the name of Grosvenor & Richards, in which contention they are upheld by the above decision.

### HINTS TO BUYERS.

Druggists who have calls for Milk Weed Cream, which is being so extensively advertised in literary and ladies' magazines by Frederick F. Ingram & Co., Detroit, Mich., can obtain supplies of 2-ounce jars retailing at 50 cents for \$3.50 per dozen by sending direct to the makers. Expressage is prepaid on single dozen lots, and free samples and advertising are sent with every order.

Have you written to the Borine Chemical Company, 21 West Twenty-third

street, New York, for a supply of their pocket day books and physicians' visiting lists? They will send them free on application to our readers, and if you will send them a list of the physicians in your neighborhood they will advertise you to them without any cost. They are doing this so as to introduce Borine, a new non-toxic, non-irritant, antiseptic and prophylactic, which is available for either internal or external use.

The editors of the different trade journals going to druggists, confectioners and soda syrup makers are constantly importuned by their readers for information as to the economical purchase of the popular German fruit oils. We are now in a position to state that the Mexican Vanillin Company of Buffalo, N. Y., are heavy dealers in these products, and druggists who propose to utilize such oils as banana, catawba, cherry, claret, pistachio, etc., during the coming season will find it profitable to write the Mexican Vanillin Company for prices and samples. In doing so you will confer a favor by mentioning this journal.

One of the most convenient means of turning out a finished suppository of perfect shape and appearance is found in the Gibbs Hollow Suppository, with conoidal self-sealing stopper. It does away with the mess and inconvenience of the old style method of turning out medicated suppositories, and it is not too much to say that the Gibbs has proved a boon and a blessing to many a tired pharmacist.

The Thompson & Norris Company, manufacturers of cork and corrugated papers for packing bottles, etc., whose principal plant is in Brooklyn, 10 to 84 Prince street, have factories also at Boston, London, England; Fuchsthal, Julich, Germany; Paris and Exideuil, France, and paper mills at Chatham, N. Y. Their product, and machinery for making it, are covered by 24 United States patents. Their goods were awarded prize medals at American Institute, New York, 1877; International Inventors' Exhibition, London, 1885; Exposition Universelle, Paris, 1889, and World's Columbian Exposition, Chicago, 1893.

That advertising isn't everything is one of the claims made by Johnson & Johnson in connection with their successful tonic *Vino-Kolafra*.

"Of course our novel advertising helps to create the demand and make the article known," said a representative of the house the other day, "but if it didn't do what we claim for it, the continuous demand that there is could not keep up. As a rule retail buyers begin by ordering a quarter of a dozen. Then they want 1, 2, 8 dozen, and finally they begin to haggle over our lowest gross prices. That shows people are appreciating the tonic at its worth."

### Do You Sell Soda Water Tickets?

If you do sell soda water tickets you should get the neat little ticket cases made by the Bay State Mfg. Company, South Framingham, Mass. They are very neat and form excellent means for advertising, as they are so cheap that the druggist can give them away to his customers. Send two stamps to the Bay State Mfg. Company, South Framingham, for a specimen, with quotations on printed and on plain cases.

**A Great Catalogue Promised.**

Inquiry at the headquarters of the National Folding Box & Paper Company, at New Haven, elicited the fact that the factory is still running night and day filling the orders that are rushing in about the middle of February. A comprehensive catalogue will be issued by the company. It is in the works now. The size will be ordinary octavo, and the covers and inside pages will be lithographed and the letters embossed. It will be attractively bound and, of course, fully illustrated with lithographs of the many styles and kinds of boxes that the company manufacture. All those who have any occasion to use boxes—and, by the way, nowadays what druggist has not—are advised to write to the company at New Haven for a copy of the forthcoming publication.

**For the Spring.**

Many people made the mistake when packing away their winter clothing of exposing it in the open air on some sunny, balmy day in May. This offers a premium to the moths, which are sure on such a day to be seeking a suitable place to lay their eggs, for in the clothing so exposed they have the best possible depositories; and when the eggs are once laid no amount of camphor can prevent the damage which will follow the hatching of the larvæ. Druggists should bear this in mind when selling moth preventives and caution their patrons against taking this unnecessary risk. Among the moth insecticides and preventives on the market one of the most economical and effective is the White Tar Camphor put up in convenient sized packages by the White Tar Company, 128 Warren street. The packages are put up in  $\frac{1}{4}$  pounds at \$3 per gross and  $\frac{1}{2}$  pounds at \$5 and pounds at \$9 per gross; and since the White Tar Company do not canvass the grocery trade druggists can sell their products, which also includes, besides the camphor white tar paper, camphorette, etc., at prices which give them assurance of a reasonable margin. A full list can be obtained by addressing White Tar Company, 128 Warren street. Now is the time to look into the matter for the spring trade.

**Belladonna Plasters.**

Perhaps the most original advertisement in this issue will be found on page 21. Read it carefully, it gives, among other things, information in reference to Seabury & Johnson's Belladonna Plasters, which have not been advanced in price; on the contrary there has been a reduction in prices in their latest catalogue, but quality remains as before, of the highest standard.

**NOTES ON PRICES.****Alcohol from Acetylene.**

A sample of ethyl alcohol has been shown in the trade. It is said to be produced from lime and coal dust treated by electricity from carbon electrodes, and its cost is given as under 5 cents a gallon. The sample shows it to be of a strong metallic flavor, which would totally unfit it for the ordinary uses of alcohol other than, perhaps, for scientific purposes. It has a most unpleasant aroma, and a still more unpleasant taste.

**Wholesale Druggists' Prices.**

The lower range of values, which has been a feature of the primary market for the past few months, has influenced a corresponding decline in the prices quoted by wholesale druggists for such quantities as retailers usually purchase. The more important fluctuations of the fortnight are noted in the following paragraphs:

**ADVANCED.**

Chrysophanic acid,  
Citric acid,  
Iodine,  
Oil anise,  
Oil cassia,  
Propylamine,  
Ginger, Jamaica,  
Orris root,  
Seidlitz mixture,  
Tartaric acid,  
Rochelle salt.

**DECLINED.**

Boric acid,  
Gum chicle,  
Gum kino,  
Gutta percha,  
Syrup iron iodide,  
Potass acetate,  
Potass citrate,  
Resin jalap,  
Jalap root,  
Squill root,  
Salol,  
Santonin,  
Pumpkin seed,  
Silver nitrate,  
Thymol.

*Acid, Boric*, is lower, and quoted 12c. to 15c. for crystals and 14c. to 18c. for powdered.

*Chrysophanic Acid* prices have advanced to 60c. to 62c.

*Citric Acid* is marked up with 40c. to 44c. now asked.

*Gum Chicle* is in better supply, and values have declined 5c., with the range quoted 40c. to 45c.

*Gum Kino* is not held so firmly as it has been by the principal holder, and supplies are offered more freely at the range of \$3.25 to \$3.50, a decline of 25c.

*Gutta Percha*, chips, can be purchased about 10c. cheaper; \$1.40 to \$1.50 being now quoted as against the former price of \$1.50 to \$1.75.

*Iodine* is in rather an unsettled condition at present, and while prices have advanced a fraction it is not thought likely to be for long. The revised quotation is \$3.75 to \$4.

*Oil Anise* continues scarce and high; quoted \$2.75 to \$3.

*Oil Cassia* is higher and firm at \$2.65 to \$3.75.

*Potassium acetate* has declined materially in the interval and is now quoted 28c. to 30c.

*Potassium citrate* is also easier and quoted cheaper; 48c. to 53c. is now the range.

*Propylamine* has advanced to 55c.

*Resin of Jalap* has declined, in sympathy with the root, and 28c. to 25c. is now quoted, as against 28c. to 25c., the former range.

*Roots.*—*Ginger, Jamaica*, bleached is higher, with 25c. to 28c. now quoted; powdered has advanced to 30c. to 35c. *Jalap* is 3c. cheaper, the revised quotations for whole and powdered being 22c. to 25c. and 30c. to 35c. *Orris* has hardened owing to scarcity, with the present quotation 30c. to 38c. *Squill* has receded a trifle and a decline of 4c. is noted.

*Salol* is less firm and offers at 25c. to 30c.

*Santonin* is quoted lower, a reduction of 4c. being made from previous prices.

*Seed, Pumpkin*, has declined to 10c. to 12c.

*Silver Nitrate*, has declined 5c., being now quoted 50c. to 55c.

*Syrup Iron Iodide* is cheaper, prices being lowered to 46c. to 48c., as against 48c. to 50c., the former range.

*Thymol* is quoted lower, say 22c.

**Review of the Wholesale Market.**

NEW YORK, January 24, 1896.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The movement of stock in the several departments of Drugs, Dyestuffs and Chemicals has continued of fair proportions during the interval, though no transactions of special importance have come to the surface. The jobbing outlet has shown a slight increase in comparison with the business volume reported in our last, but there is a notable absence of speculative buying, and dealers are observing the usual caution in not taking up stocks in excess of legitimate requirements. Prices of most staple lines are maintained with a fair show of firmness, though a slight break in Opium has lowered prices on that article a few cents, and Quinine is offering from second hands at a fraction below the established range. There is some complaint in the trade about sluggishness in collections, but the complaints come mostly from small dealers. The more important fluctuations are noted in the following tables:

**ADVANCED.**

Arsenic,  
Paris green,  
Oil citronella,  
Gentian root,  
Colocynth,  
Gum tragacanth,  
Camphor,  
Sugar of milk,  
Messina essences,

**DECLINED.**

Opium,  
Oil peppermint,  
Caffeine,  
Guaiaac,  
Gum guaiac,  
Gum kino,  
Menthol,  
Saffron, Am.  
Quicksilver,  
Blue vitriol.

**DRUGS.**

*Alcohol* has not varied in any important particular since our last; rumors of shading by one of the leading producers have been rife in the market, but lack confirmation. We hear of no sales of quantities at less than our quotations, which stand \$3.32 to \$3.35 for grain. Wood is held at 90c. to 95c. for 95 and 97 per cent. respectively. Alcoholene continues quoted at \$1.20.

*Arnica Flowers* have remained quiet, though the market is maintained upon the basis of  $6\frac{1}{4}$ c. to  $6\frac{1}{2}$ c.

*Balsams* generally are not inquired for to any extent and only ordinary jobbing sales are reported. *Copaiba* is quoted at 82c. to 83c.; *Canada Fir* at \$2.15 to \$2.25; *Oregon Fir* at 60c. to 65c., in barrels, and 70c. to 75c. in cans. *Tolu* is held and jobbing fairly at 55c.

*Barks.*—No new feature has developed in this line and the business that passes is at practically the same line of prices that has ruled for some little time past. *Cascara Sagrada* is the exception, a fair business having been done in this bark at slight advance.

*Cacao Butter* is not inquired for to any extent and current transactions are limited to small jobbing lots, though prices are fairly well sustained at the quoted range of, say, 38c. to 34c.

*Caffeine* continues weak and a trifle irregular, with down to \$6.25 quoted for spot delivery. We quote the range at \$6.25 to \$6.50.

*Beeswax* has been attracting some attention of late, and the article is reported scarce, though it is difficult to determine as to whether the reported scarcity may

be due to natural or artificial causes. In the face of a limited demand, prices have advanced and 24c. is now the lowest price quoted. Japan and Brazil meet with about the usual demand, with the current sales at previous prices. The former is quoted at 8c. to 8½c.

*Cod Liver Oil* has weakened a trifle in the interval, and ordinary can be bought down to \$48, though \$50 to \$52 represents the range, as to quality, with \$55 paid in some instances for special brands.

*Colocynth*, Spanish, is quoted at an advance by the leading holders and nothing now offers below 30c. Trieste is also higher and quotations are largely nominal, with 70c. asked for spot stock in most instances. Stocks at primary sources are reported low.

*Cubeb Berries* are selling in small lots only and there is a notable absence of demand. XX stemless offer at 10c., and this figure could be shaded on a firm bid for quantities. Ordinary can be purchased down to 7c., with 8c. the outside figure.

*Glycerin* continues held with increased firmness, though prices are as last quoted, say 17c. to 17½c. for refined in bulk. The demand continues active.

*Menthol* is somewhat neglected at the moment, and lots to arrive are quoted at \$4; small sales of spot stock have been made at \$4.15.

*Morphine* continues in fair jobbing demand and prices remain steady with \$1.40 to \$1.60, as to brand, for bulk.

*Opium* has sold moderately well in the interval in single cases and broken packages, but important inquiry is yet lacking and slightly freer offerings are being made; sales of single cases at \$1.95, with \$1.97½ to \$2.10 quoted for smaller quantities. Powdered is still quoted at \$2.50 to \$2.55 for ordinary and \$3 to \$3.10 for high test.

*Quinine* has not been noticeably active of late and only a moderate business has been done in the interval. Outside lots of foreign in bulk are quoted at 26c. to 27c., but no large transactions come to the surface. Domestic is held firmly at 28c. to 30c., as to brand.

*Saffron*, American, has met with very little inquiry of late, and being urged in some quarters, lower prices have resulted. Several fair sized lots have changed hands within the past few days at 84c. Valencia is quoted at \$6.75 to \$7.50.

*Soap*, Castile, Conti's white is finding about the usual sale, with 9¼c. to 9½c. usually quoted.

#### DYESTUFFS.

*Aniline Salt* continues in active demand and we are reported a sale of several tons at 12½c., which remains the outside figure.

*Cutch* remains steady, and prices lower than the basis of 5c. for prime are the exceptions. There is an absence of important inquiry for the article.

*Gambier* is weak and neglected, with round lots from store offering at 4c.

*Indigo* remains quiet, but the market is steady at the quoted range.

*Nuttgalls* are higher in the foreign market, but prices here are unaffected. Blue Aleppo is finding sale at 12½c., though 18c. to 18½c. is obtained in some instances.

*Sumac* is in fair jobbing demand and steady. Sicily quoted \$50 and Virginia \$40.

#### CHEMICALS.

*Arsenic*, white, has marked an advance since our last, and the article is under good control and offered sparingly upon the basis of 5½c. to 6c. for Continental and English respectively.

*Brimstone*, crude, offers for future arrival at a shade below previous quotations, or, say, \$15.25 for unmixed seconds and \$14.75 for thirds. On the spot, however, there is little offering and holders ask \$17 for seconds.

*Borax* is moving out fairly well and prices are steady at 5½c. to 5¾c. for concentrated, and 6c. to 6½c., as to quantity and crystal. Rumors of a probable advance have been revived, but do not appear to have strong foundation.

*Chlorate Potash* is firmer, though not quotably higher; 9½c. being yet quoted for spot and forward goods.

*Citric Acid* is moving out firmly in small quantities at 87½c. to 88c.

*Blue Vitriol* offers in some instances from second hands at 35½c., and manufacturers are, it is said, booking orders at prices relatively as low.

*Oxalic Acid* is a trifle irregular and sales have been made down to 7c. from outside holders, though the combine prices are held firmly at 7¼c. to 7½c.

*Paris Green* has been in active demand as a result of the rise in arsenic, and the price for bulk has been advanced to 12c. to 13c., though the inside figure can be shaded on a firm bid for quantities.

*Nitrate Soda* varies but slightly in price from \$1.72½ to \$1.75 for either spot delivery or future shipments.

*Quicksilver* has receded a fraction, and is now quoted steady at 52c.

#### ESSENTIAL OILS.

*Anise* continues to reflect a rising market, and the quotation in China is on a parity with \$2.85 here. Small lots are still obtainable in this market down to \$2.60, but limits have been raised generally to \$2.70 to \$2.75.

*Cassia*, while not higher, is decidedly firm, with \$2.50 to \$2.60 quoted for 70 test and \$2.35 to \$2.40 for 60 test. Offerings are restricted to small lots.

*Citronella* loses none of its strength, and values have hardened materially, with 50c. now generally asked, though we hear of some small lots offering at about 45c. to 47½c.

*Clove* is quiet and weaker, in view of the low price of spice buds. Sales are now making down to 40c. for stem oil and 45c. to 50c. for bud.

*Cubeb* is easier, though not quotably lower, and nothing offers below \$1.

*Lemon* and other Messina essences, while not quoted higher, are decidedly firmer, owing to strong advices received recently by cable from the foreign markets. *Orange*, sweet, has advanced, and \$2.05 to \$2.10 is generally quoted, though \$2 will buy.

*Peppermint* is slow of sale and the market develops an easier feeling in consequence. Western bulk is noticeably weaker, with down to \$1.70 quoted in a primary market and \$1.75 here. New York State brands are quoted at \$1.80 to \$1.90. *Cassia Oil* is held at about \$2.20, with only a limited inquiry experienced.

#### GUMS.

*Aloes* is quiet, though holders evince no disposition to urge sales by price concession, the present range being unusually low.

*Camphor* continues in good statistical position and prices are firmly maintained at the quoted range. Japan, in 1 lb. and 2 lb. cakes, can be purchased at 59c. to 60c., and small supplies in ounces are offered at 61c. City refiners quote 59c. for bbls. and 60c. for cases.

*Chicle* is held very firmly despite the continued heavy arrivals, and 36c. to 37c. is quoted firm for round lots from store.

*Guaiaac* is selling fairly in jobbing quantities at about 12c.

*Kino* continues weak and unsettled, though we hear of nothing offering at less than \$1.75 for true gum.

*Tragacanth* is in exceptionally strong possession, and firmly held at the prices recently established.

#### ROOTS.

*Gentian* is in light supply and held steadily at 4¼c. to 4½c.

Other roots have developed no new feature of consequence, and a quiet market prevails.

#### SEEDS.

*Celery* offers, to arrive, at 12½c. with 18c. quoted for spot goods.

*Hemp* is selling moderately well in a jobbing way at 2½c.

*Mustard*, California yellow, is dull at 2¼c. to 2½c. Trieste, brown, is scarce and is quoted at 8¼c. to 8½c. German, yellow, is held at 1¾c.

*Sabadilla* has advanced sharply in the foreign market owing to scarcity, and the import cost is now about 25c., quoted here 20c.

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# American Druggist and Pharmaceutical Record.

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## Leading Articles.

The criticism of Mr. MacEwan of the *Chemist and Druggist*, directed against Professor Walker's method of assaying *spt. ether nitrosi*, as described in our issue of January 25, has brought forth a reply from Professor Walker.

We continue in this issue, on page 81, the valuable paper on the detection of the newer medicaments.

The practical pharmacist will appreciate the paper on new methods and practice on page 84.

Elbert E. Fisher of Bridgeport, Conn., has communicated the results of some experiments in the preparation and preservation of syrup of ferrous iodide on page 82.

How to prepare for a board examination is told on page 85 by the president of the Wisconsin Board of Pharmacy.

Toilet waters and their preparation forms the subject of a paper by H. L. Grimes on page 83.

A very exhaustive article on the detection of certain abnormal ingredients in the urine forms the subject of a paper by F. W. Haussman of Philadelphia on pages 86, 88 and 87.

The increasing attention which is being given to the study of digestive proteolysis will make the paper on digestive ferments, on page 87, one of particular interest to the pharmacist.

Kola, that widely advertised drug, is the subject of a valuable paper by Fred. B. Kilmer on page 90.

## ENFORCING THE PHARMACY LAWS.

THERE has always been a considerable contingent of pharmacists who have felt inclined to ask, "Of what benefit are pharmacy laws to us?" though but few have publicly propounded this question. Any benefit which may accrue to pharmacists from pharmacy or poison laws must be incident to and not an object of legislation, for these, like all other laws, are for the protection of the public. Pharmacists may reap some benefit from the enforcement of correctly drafted laws, but the public is so suspicious that as soon as serious efforts are made to enforce a law against any other than a pharmacist a great outcry against "class legislation" is at once raised.

## CLASS LEGISLATION.

This is illustrated by the conditions existing just now in Chicago and in Brooklyn. In both these cities an effort is being made to enforce the pharmacy law. In both cities this effort has provoked opposition, backed by the cry of "class legislation." In Chicago the effort to enforce the law through appeal to the criminal courts has met with a rebuff at the outset, an indictment found against a druggist for the illegal practice of pharmacy having been dismissed in the first case which came up for trial. It is to be presumed, however, that the Illinois Board will not let the matter rest here, but will take other means to secure the enforcement of the law.

## ENFORCING THE LAW IN BROOKLYN.

In Brooklyn the campaign has just begun, the opening taking the form of an order from the Superintendent of Police instructing officers to strictly enforce the pharmacy law. This move on the part of the police is an outcome of a personal inspection of the groceries, &c., made by DONALD L. CAMERON, president of the Kings County (Brooklyn) Board of Pharmacy. It has long been the custom for the board to have an annual inspection of the drug stores of Brooklyn, which generally

meant that an employee of the board visited each drug store in the city and ascertained whether or not the proprietor and his employees were properly licensed. Mr. CAMERON, who was elected president of the board last spring, not content with this perfunctory performance, himself undertook the inspection, not confining his attention to drug stores. He found that the law restricting the sale of poisons to licensed persons was totally ignored all over the city and that no one outside the drug business seemed even to be aware of its existence.

## GROCERS SELLING POISONS.

In the windows and on the shelves of the smaller grocery stores of the suburbs he found stocks of laudanum and canned corn, carbolic acid and chocolate displayed in the windows and on the shelves in an indiscriminate mixture. Mr. CAMERON found no difficulty in freely purchasing from these grocers a variety of poisons which are not sold in drug stores save by licensed clerks and on registration of the name of the purchaser. Mr. CAMERON found a stock of drugs in every one of the 25 grocery stores which he visited and each of the grocers was warned that he was violating the law. The department stores transgress the law even more flagrantly than do the grocery stores, and Mr. CAMERON assures us that a case will be speedily brought against them.

## AS THE PUBLIC VIEW IT.

Unfortunately for the proper enforcement of the law the public, as has already been noted, stand in such dread of being imposed upon by the erection of a privileged class that they give at best but lukewarm support to the poison and the pharmacy laws. Though quick to condemn any lapses on the part of the druggist, the newspapers readily condone transgressions of the law by others than pharmacists. In commenting on the action of the board, for instance, the Brooklyn *Citizen* says:

Until the board brings suit against one or more of them who are alleged to be violating



the law the question whether they are or not will be undetermined. Ostensibly the object of the law is to prevent the people from obtaining poisonous preparations, either with innocent or with criminal intent, even druggists being forbidden to sell the same except on the prescription of a physician. Those tradesmen who sell such articles believe that the law, at bottom, is really intended to protect the retail druggists against an invasion of their trade by others, and they are supported in this belief by the fact that poisonous articles may be obtained from druggists without a physician's prescription, as in the case of certain patent medicines in which there may be poison enough if the bottle's contents were all taken at once, to kill half a dozen men.

Such a treatment of the subject by the newspaper press renders the task of enforcing the law a most difficult one. It leads the transgressors to look upon themselves in the light of martyrs, suffering from unjust persecution, and has a generally demoralizing tendency in encouraging contempt for established law. If the laws are good they should be enforced. That they do benefit the public when enforced must be conceded by every one who has made an adequate study of the subject.

### THE NEW PHOTOGRAPHY.

SINCE the publication of our last issue more complete details have been received as regards the character of the photographs produced by Professor ROENTGEN and the nature of the agent which produces them.

#### PROFESSOR ROENTGEN'S THEORY.

The investigator says that there appears to be some sort of relationship between the new rays and the ordinary light rays, since both cast shadows, produce fluorescence and exert chemical action. ROENTGEN's rays are not identical though they are associated with the cathode rays of CROOKES. He has observed that in the passage through air a smaller proportion of the X rays than of cathode rays are absorbed. Again, the direction of the latter can be changed by a magnet while the course of the former cannot. He believes, however, that the origin of the "X rays," as he terms them, is at that portion of the walls of the tube where the cathode rays produce the most brilliant phosphorescence. Now, with a magnet, one can turn the cathode rays so that they will impinge on a different spot, and the X rays will thus be generated in a new place. But wherever developed the latter proceed thereafter in a straight line, unaffected by a magnet. The Professor believes that it is unnecessary to have the walls of the vacuum tube entirely of glass. The impact of the cathode rays on an aluminum plate or window at the end of the tube would be equally efficacious, in his opinion, in producing the newly found radiance.

Ultra violet rays can (1) be turned from their course if passed from air into water, or through carbon disulphide, aluminum, rock salt and some other substances; (2) they can be reflected at the surface of the bodies named; (3) they are subject to the laws of "polarization," and (4) their absorption by bodies through which they pass depends on the density of the latter. Elaborate experiments by ROENTGEN himself show that the X rays behave in none of these ways.

It has long been known that aside from the transverse vibrations of light rays in ether, longitudinal vibrations are possible and, according to many physicists, they must occur; their existence, however, has not as yet been proven and consequently their properties have not been experimentally investigated. While not as yet prepared to positively assert that the new rays have a longitudinal vibration, Professor ROENTGEN states that during the course of his investigation he is more and more inclined to accept this theory as the correct explanation of the phenomena observed, "but the hypothesis advanced still requires a more solid foundation."

#### PROPERTIES OF THE NEW RAYS.

The newly discovered rays seem to have the faculty of penetrating all bodies, though with a marked difference in the time and presumably in the strength of the rays required for penetrating different substances. In none of the substances so far examined by ROENTGEN has there been shown any appreciable refraction or reflection of the new rays, although the substances which are not completely permeable by these rays give a kind of diffuse reflection, such as is shown to light by a strong smoke or a heavy fog.

#### THE PREDECESSORS OF ROENTGEN.

Others have preceded ROENTGEN in this work, though their results have not been carried to any practical end. LEONARD published in 1894 in the *Annalen der Physik und Chemie* photographic reproductions very similar to those of ROENTGEN. The late Professor ULTMANN in 1891 made some photographs of a young woman by means of the light from a CROOKES tube, but was dissatisfied with the results, as the finished picture showed a large number of blotches upon the face, whereas the subject had a very clear, smooth skin. A second experiment gave the same results. Some 14 days later ULTMANN was called in as a physician to this lady and found, to his surprise, that her face had broken out with an eruption, which produced exactly the same effects as were shown in the previous photographs. The director of the Royal Prussian Astronomical Observa-

tory has contributed an article to the *Reich's Anzeiger*, in which he claims for Professor HITTORF the priority over CROOKES in discovering the peculiarities of the cathode light of what is now known as Crookes tube; he also states that the character of the cathode rays was studied thoroughly by GOLDSTEIN, who many years ago showed that these rays could produce photographs. Professor BELL of telephone fame also made some experiments in this direction and some interesting discoveries ten years ago.

The first successful experiments with the new photography in the United States were those conducted by Professor TROWBRIDGE of Harvard University and Professor WRIGHT of Yale University. These experimenters produced photographs, drawings of which we are enabled to publish elsewhere through the courtesy of the *New York Journal*, the first paper to publish any photographs of this kind in this country. Extracts from the articles by Professors TROWBRIDGE and WRIGHT which accompanied the illustrations in the *Journal* are published in this issue.

### LIQUOR LEGISLATION IN NEW YORK.

IT is difficult to determine the cause of the apathy of New York druggists to their material as well as their scientific interests. This apathy was shown in the fact that the only representatives of the retail drug trade who appeared at the hearing on the RAINES liquor license bill at Albany recently were the members of a committee of the King's County Pharmaceutical Society. Under the RAINES bill every druggist would have been compelled to take out a license at a fee of \$250 annually. This committee, however, proposed amendments under which two classes of druggists' licenses are provided for, one allowing him to sell on the prescription of a physician only, the prescription not to be repeated. The fee for this license is put at \$5. The second-class druggist's license, for which \$30 is the fee, permits of the sale of liquor for medicinal purposes only, with or without a physician's prescription, in quantities of not more than 24 ounces, the sale not to be repeated within 24 hours to any member of the same family. While these amendments have not been formally accepted, Mr. RAINES has signified his willingness to consider them, with a view to possibly incorporating them or some such provisions in his bill. This is not the first time that the druggists of the State at large have allowed the druggists of Kings County to pull their chestnuts out of the fire.

Written for the  
American Druggist and Pharmaceutical Record.

## THE ASSAY OF SPIRIT OF NITROUS ETHER.\*

BY PROF. DAVID WALKER, PH.G.,

Kansas City College of Pharmacy.

I am pleased to note that my article upon the assay of spirit of nitrous ether has attracted the attention of Mr. Peter MacEwan, whose criticism of the process appears in your journal for January 25. I must admit that I was not aware of its having been suggested by any one. A search through my books of reference and files of journals, failed to inform me of that fact. The trouble seems to have been that the process was abandoned before I began the study of pharmacy, whether deservedly so or not, it remains for us to decide.

It did not seem possible for me to have obtained results so uniform, when compared with the nitrometric tests, from so many samples of spirit varying so greatly in nitrite strength, if the process (under the conditions and restrictions proposed in my former article) was as fallacious as Mr. MacEwan would have us believe it to be.

### COMPARATIVE TESTS.

In order to determine the exact variation, comparative tests with the same sample of spirit were made with the nitrometer, as well as with the titration process. Further investigation had shown that five minutes maceration was ample for the completion of the reaction, and consequently the maceration was limited to exactly five minutes for each test with Sample A. The readings of the nitrometer were made at intervals of five minutes, during one hour, in each test.

It is usually stated that the reaction in the nitrometer is practically completed in five minutes.

Sample A, a U. S. P. spirit made six months previous, and having a specific gravity of 0.818, gave the following results by titration with sodium thiosulphate solution:

### RESULTS OF TEN TITRATIONS BY MY METHOD.

Sample.	1st. Ccm.	2d. Ccm.	3d. Ccm.	4th. Ccm.	5th. Ccm.	6th. Ccm.	7th. Ccm.	8th. Ccm.	9th. Ccm.	After 1 hour maceration. Ccm.
A.....	18.3	18.5	18.6	20.1	19.7	18.5	18.3	18.9	19.2	22.5
B.....	8.9	7.9	9.1	9.4	9.1	8.0	9.5	8.5	8.2	15.0

Taking the extreme results, 18.8 and 20.1 ccm., we find the variation to be as follows:

1 ccm. N Sodium thiosulphate solution = 0.012658 gm. 18.8 ccm. = 18.8 × 0.012658 = 0.23815499 gm. Iodine.

Then as 126.58 : 0.2315499 :: 74.87 : x,  
x = 0.187012 gm. C<sub>2</sub>H<sub>5</sub>NO<sub>2</sub>.

5 ccm. sp. gr. 0.818 = 4.09 gm.  
0.187012 + 4.09 = 3.85 + per cent. of C<sub>2</sub>H<sub>5</sub>NO<sub>2</sub>.

The other extreme, 20.1 ccm. = 0.1504096 gm., or 3.677 + per cent. of C<sub>2</sub>H<sub>5</sub>NO<sub>2</sub>.

One lot of the mixture was allowed to macerate in the open flask for one hour before titration when it required 22.5 ccm. to discharge the color, indicating 0.1684567 gm., or 4.118 + per cent. C<sub>2</sub>H<sub>5</sub>NO<sub>2</sub>.

The nitrometer readings, for Sample A,

barometric pressure, 748 mm. temperature 9 degrees C. were as follows:

by a short rubber tube, was inserted until a perfect joint was made.

### TEN NITROMETER READINGS OF THE SAME SAMPLE.

Sample.	1st. Ccm.	2d. Ccm.	3d. Ccm.	4th. Ccm.	5th. Ccm.	6th. Ccm.	7th. Ccm.	8th. Ccm.	9th. Ccm.	10th. Ccm.	11th. Ccm.	
A.....	47.2	47.5	47.8	48.0	48.2	48.3	48.3	48.4	48.5	48.5	48.5	First trial.
A.....	47.0	47.3	47.5	47.8	48.0	48.2	48.4	48.5	48.6	48.8	48.9	Second trial.
B.....	16.2	16.4	16.5	16.6	16.7	16.7	16.7	16.7	16.7	16.7	16.7	First trial.
B.....	12.3	13.2	13.5	13.6	13.8	14.0	14.1	14.3	14.5	14.8	14.9	Second trial.

Taking lowest reading of first trial and making corrections for temperature and barometric pressure, we find:

47.2 + 1.082967 (1 + 9 × 0.008668) = 45.7 ccm. at 0 degrees C.

(45.7 × 748) + 760 = 44.68 ccm. at 0 degrees C. and 760 mm.

0.0053529 × 44.68 = 0.149807573 gm.

C<sub>2</sub>H<sub>5</sub>NO<sub>2</sub>.

0.149807573 + 4.09 = 3.662 + per cent.

of C<sub>2</sub>H<sub>5</sub>NO<sub>2</sub>.

The highest reading, 48.5 ccm., at 10 degrees C., gives: 0.158895175 gm., or 3.750 + per cent. of C<sub>2</sub>H<sub>5</sub>NO<sub>2</sub>.

Second trial, lowest reading, 47 ccm.,

at 10 degrees C. = 0.14846412 gm., or

3.680 + per cent. of C<sub>2</sub>H<sub>5</sub>NO<sub>2</sub>.

The highest reading 49 ccm. at 11 de-

grees C. = 0.154867516 gm., or 3.774 +

per cent. of C<sub>2</sub>H<sub>5</sub>NO<sub>2</sub>.

Sample B. F. F. F. niter sp. gr. 0.925,

gave extremes by titration:

7.9 ccm. = 0.059147 gm., or 1.279 + per

cent. of C<sub>2</sub>H<sub>5</sub>NO<sub>2</sub>.

9.5 ccm. = 0.0711265 gm., or 1.587 +

per cent. of C<sub>2</sub>H<sub>5</sub>NO<sub>2</sub>.

After one hour's maceration the mixture

required 15 ccm., to discharge the

color, indicating 0.113804 gm., or 2.427

per cent. of C<sub>2</sub>H<sub>5</sub>NO<sub>2</sub>.

The extremes of first trial by nitrom-

eter after corrections for temperature

(14 degrees C.) and barometric pressure

(741 mm.) gave the following results:

16.2 ccm. = 0.050827029 gm., or 1.088 +

per cent. of C<sub>2</sub>H<sub>5</sub>NO<sub>2</sub>.

16.7 ccm. = 0.05168466 gm., or 1.112 +

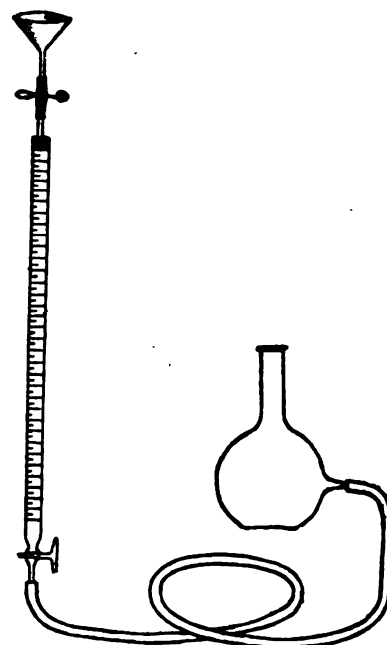
per cent. of C<sub>2</sub>H<sub>5</sub>NO<sub>2</sub>.

By the second trial the lowest reading,

12.5 ccm. = 0.08823806 gm., or 0.826 +

This forced the solution up into the neck of the funnel and by means of a Mohr's pinchcock a tight joint was secured. Then by opening the stopcock of the burette, the point of which was connected with a rubber tube, a little longer than the burette, the other end being connected with a 4-ounce tubulated receiver by means of a rubber cork and glass tube, an easy control of the height of liquid in the equilibrium tube was provided.

The burette was graduated so near to the top that the rubber stopper left only



WALKER'S EXTEMPORIZED BURETTE  
NITROMETER.

a small space to be determined. By inverting the burette the space between the graduation and stopcock could be more accurately determined and would remain constant, but if the spirit was any where near the U. S. P. strength the equilibrium tube of Mr. MacEwan's apparatus would be uncontrollable.

### DOMESTIC AMMONIA.

[Wiener Droglsten Zeitung.]

The increasing use of ammonia in the household makes the following of some interest:

Borax.....	60 gms.
Oil of cinnamon.....	10 drops
Oil of cloves.....	8 drops
Oil of citronella.....	8 drops
Alcohol.....	8 grams
Ammonia water.....	7.5 liters

\* See this journal for January 25, page 58.



**Fire Proof Ink.**—White paper has been prepared, by using borax, asbestos, etc., which will not burn. There has so far been no ink prepared which when subjected to fire is not either destroyed or rendered illegible. Lüdgers of Gorlitz, however, publishes (*Pharm. Centralh.*) a formula as follows, which he claims will furnish an ink the legibility of which will not be affected by fire: Mix 40 parts of finely powdered graphite, 72 parts of gum copal, 8.5 parts of ferrous sulphate, 8.5 parts of tincture of galls and 14 parts of indigo sulphate, add to a sufficient quantity of water, boil and then cool, when the ink is ready for use.

**Ammonia in Corks.**—In our last issue (page 45) it was noted that the reaction with Nessler's reagent which was observed to occasionally take place with water in which fresh and presumably clean corks have been boiled was due to tannin and not to ammonia. A rejoinder (*Schweiz. Wochenschr. für Pharm.*) states that it is from a practical point of view immaterial whether the reaction is due to tannin or to ammonia; for in either case it vitiates the results. Experiments showed that when tannin was mixed with absolutely ammonia free water and the water distilled, a sufficient quantity of the tannin came over to give the disturbing reaction with the Nessler reagent. In view of this fact it would therefore be desirable to follow the instructions issued by the Association of Swiss Analytical Chemists to the effect that all corks before being used for stopping up bottles of water intended for analysis should be boiled in water for some time.

**The Valuation of Peppermint Oil.**—According to the results obtained by Andres (*Apotheker Zeitung*) peppermint oil contains the following ingredients: 1, A hydrocarbon,  $C_{10}H_{18}$ , menthene; 2, a hydrocarbon,  $C_{10}H_{18}$ , dihydromenthene; 8, two oxygen compounds,  $C_{10}H_{18}O$ , menthol; and  $C_{10}H_{18}O$ , menthone. The value of the oil depends chiefly on the small quantity of unsaturated and large quantity of saturated compounds. Bukowsky has now examined 15 different samples of the oil, Polish, German and English, and has used especially the modified iodine absorption process proposed by Andres. The oil was fractionated (the saturated compounds boil at the higher temperatures) and the fractions noted. Into a flask holding about 150 ccm., 1 gm. of the oil dissolved in 10 ccm. of chloroform was placed, and 20 ccm. of Hübl's solution added. If the mixture becomes colorless after standing for some time, 5 to 15 ccm. more iodine solution are added. The titration was carried out in the usual way. The average absorption is placed by the author at 81.

**Dilution of Urine Before Examination.**—Zeehnisen argues in favor of the older methods for the detection of albumin, sugar and bile pigments in urine as being preferable to the many new methods. At the same time he directs attention (*Deutsch. Med. Wochenschr.*, 1895, 52) to the great importance of diluting the urine before examination to a uniform specific gravity of 1.005. When this is done the nitric acid test gives the sharpest reaction with even a trace of albumin, while the physiological constituents present do not, in this diluted form, reduce Fehling's solution as they sometimes do if the undiluted urine is used.

**The Detection of Salicylic Acid in Food, Etc.**—Van Ledden-Hulsebosch gives (*Pharm. Weekblad*, No. 85) the following simple process: Put 15 or 20 c.cm. of the fluid under examination into an extraction apparatus (if a solid either dissolve it in water or mix it with boiling water), having first freed it from alcohol if any be present. Then extract with ether for half an hour; pour the condensed ether on the surface of a weak aqueous solution of ferric chloride, and allow to evaporate spontaneously. A distinct violet coloration will be produced in the presence of as little as 1-100 mg. in 25 c.cm. of the fluid examined.

**Crystallization of True Digitalin.**—The characteristic disposition to separate out in grains from a saturated solution which is shown by true digitalin has caused Kiliani to conclude that it is not entirely uncrystallizable. He therefore undertook some experiments in this direction (*Archiv. der Pharm.* Bd. 288, 9), using other solvents than alcohol or diluted alcohol, but without any results. He was enabled, however, to obtain the glucoside in crystalline form by crystallizing it out at high temperatures. Methyl alcohol proved the best solvent for this purpose. Kiliani placed 2 parts of methyl alcohol and 1 part of pure true digitalin in a receptacle provided with a back-flow condenser and boiled until complete solution was effected. He then allowed the temperature to sink gradually to 48 degrees C., and kept it at this temperature for several hours. Fine white needles separate out, but unfortunately only to the amount of about one-fifth of the quantity of the glucoside originally used, while the needles themselves at a lower temperature become granular in appearance and become sticky if the mother-liquor is drained or filtered off.

**Chloroform from Carbon Tetrachloride.**—Carbon tetrachloride, which is much used for technical purposes, may be made to furnish chloroform (*L. Union Pharm.*, 1895, 11) by a reduction process conducted in an apparatus, such as is gener-

ally used in the preparation of aniline. In this are placed 150 kg. of carbon tetrachloride, 200 kg. of water, 100 kg. of sulphuric acid and 80 kg. of zinc. The closed apparatus, provided with a back flow condenser, is then heated, and the hydrochloric acid evolved is led off and condensed in special receptacles, while the chloroform and the undecomposed carbon tetrachloride are condensed in the back-flow condenser and returned to the boiler. The process is complete when no more chlorine is evolved on heating. The contents of the apparatus then consist of a concentrated solution of zinc sulphate beneath a layer of a mixture of chloroform and undecomposed carbon tetrachloride. The two layers are separated, the chloroform isolated by fractional distillation and the residual carbon tetrachloride used in the next operation. If it is preferred the hydrochloric acid evolved may be taken up in an autoclave by having present a sufficient quantity of zinc to do so. A mixture of 80 kg. of hydrochloric acid (22 degrees B.), 50 kg. of zinc and 75 kg. of carbon tetrachloride may be used in place of the sulphuric acid mixture without recourse to heat. According to the first formula, 150 kg. of carbon tetrachloride yields 100 kg. of chloroform and 80 kg. of a mixture of chloroform and tetrachloride, which may be used in a subsequent operation. Furthermore, there are produced 100 kg. of hydrochloric acid of 20 degrees B.

**The Preparation of Ergotine.**—Professor Gaudin of the School of Medicine and Pharmacy of Angers, recommends the following process for preparing ergotine: 500 gm. of the freshly powdered ergot are mixed with 1.5 gm. of tartaric acid and 50 gm. of animal charcoal; the mass is moistened and extracted after standing for 12 hours, with water containing a small quantity of some harmless preservative. The liquid thus obtained is evaporated on the water bath to the consistency of a syrup, and 2.5 gm. of chalk are added. After 12 hours a weighed quantity is dried in order to determine the proportion of solid matter. Alcohol is then added to precipitate the mycose and the phosphates. The following formula gives the amount of 90 per cent. alcohol that is to be added. If E be the percentage of water  $\frac{79 E}{21}$  will bring the mixture to the proper strength for the best precipitation. After agitation, and then rest for 24 hours, the filtered liquid is evaporated on the water bath with repeated stirring; 0.75 gm. of salicylic acid is added and the product made up to 500 gm. with an aromatic water. It is then of such a strength that 1 gm. represents 1 gm. of the original ergot.—B. and C. Druggist.

**Solders for Glass.**—Charles Margot finds that an alloy composed of 95 parts of tin and 5 of zinc melts at 200 degrees, and becomes firmly adherent to glass, and, moreover, is unalterable, and possesses a beautiful metallic luster; and, further, that an alloy composed of 90 parts of tin and 10 of aluminum melts at 890 degrees, becomes strongly soldered to glass, and is possessed of a very stable brilliancy. With these two alloys it is possible, says the *Pottery Gazette*, to solder glass as easy as it is to solder two pieces of metal. It is possible to operate in two different manners. The two pieces of glass to be soldered can either be heated in a furnace and their surfaces be rubbed with a rod of the solder, when the alloy as it flows

can be evenly distributed with a tampon of paper or a strip of aluminum, or an ordinary soldering iron can be used for melting the solder. In either case it only remains to unite the two pieces of glass and press them strongly against each other, and allow them to cool slowly.

### The Detection of the Newer Medicaments.

(Continued from page 48.)

#### ALPHOL (SALICYLIC ALPHA NAPHTYL ESTER).

This substance yields with sulphuric acid a yellow color (1 to 60,000). With sulphuric acid and nitric acid it turns blue and then green; with traces up to 1 to 120,000 it turns green at once. With sulphuric acid two drops of furfural and 1 ccm. of water it turns violet, and on addition of ferric chloride green, and of acetone vapor yellow. With Fröhde's reagent it turns green (1 to 80,000). With vanadium sulphate solution\* it turns green, changing upon addition of a small quantity of water to reddish brown.

#### BETOL (SALICYLIC BETA-NAPHTYL ESTER).

This gives with sulphuric acid yellow, and with a little nitric acid an olive green (difference from salol). With sulphuric acid, 2 drops of furfural and 1 ccm. of water it gives a rose red color, turning to violet (1 to 120,000). With sulphuric acid and ferric chloride it gives a violet color, turning to reddish brown. With sulphuric acid and sodium nitrite it turns to a red brown which on heating changes to violet. With warm sulphuric acid and sodium nitrite, when cold, it turns blood red followed by rose and yellow rings. With vanadium sulphate solution, in the presence of sulphuric acid, it turns green; blue and violet streaks then form. Boiled with potassium hydrate and chloroform it turns blue. In alcoholic solution it gives a violet coloration with ferric chloride.

#### BENZONAPHTOL (BENZOIC BETA-NAPHTOL ESTER).

With sulphuric acid it turns yellow, changing to violet with green fluorescence when heated. With sulphuric acid and potassium nitrate it turns to a brownish black. With sulphuric acid and potassium nitrite it turns violet, followed by red and blue. With sulphuric acid and ferric chloride it turns violet and then red. With sulphuric acid and ammonium molybdate it turns to a bluish violet, then red, then green, and finally blue (1 to 60,000). With Fröhde's reagent the sulphuric acid solution turns violet. With vanadium sulphate solution it turns violet, followed by red and blue (1 to 30,000). With sulphuric acid, 2 drops of furfural and 1 ccm. of water it turns violet (1 to 1,000). With sulphuric acid and cane sugar it turns violet and later blue. With sulphuric acid and 20 per cent. of acetol it turns yellow. When heated with alcohol sodium hydrate and chloroform it turns blue.

#### ALPHA NAPHTOL.

A 15 per cent. solution turns violet upon the addition of sugar and twice its own volume of sulphuric acid. In 15 per cent. solution it yields a precipitate upon

the addition of one drop of a solution composed of 1 part of potassium bichromate and 1 part of nitric acid in 10 parts of water. In a dilute solution of sodium hydrate it turns blood red on the addition of 0.05 gm. of sulphanilic acid dissolved in 5 ccm. of normal sodium hydrate solution and of 0.02 gm. of sodium nitrite dissolved in 5 ccm. of normal sulphuric acid, and upon the addition of sulphuric acid it turns brown. This is known as Richardson's test. On shaking 0.2 gm. of alpha naphthol with 0.2 gm. of mercuric chloride and 0.1 gm. of sodium nitrate and 10 ccm. water at 100 degrees C. a slight scarlet deposit is formed.

#### BETA NAPHTOL.

This gives a negative reaction with sulphuric acid and sugar. With potassium bichromate and nitric acid it gives no reaction. With Richardson's test it yields a yellowish red color which is not changed on the addition of dilute sulphuric acid. With mercuric chloride, etc., it yields an abundant brown precipitate. Warmed with concentrated potassium hydrate and chloroform or chloral solution it turns blue.

#### CRESOL SALOLS.

All the cresol salols when in alcoholic solution turn violet on the addition of ferric chloride, and the color is discharged on the addition of hydrochloric acid.

*Meta cresol* with sulphuric acid and potassium nitrite turns orange, brown and then green. With Fröhde's reagent it turns blue, green and finally bluish black. With sulphuric acid and vanadium sulphate solution it turns blue, then green and finally greenish brown.

*Paracresol* turns to a red brown and finally cherry red color on the addition of sulphuric acid and nitric acid. With sulphuric acid and nitrous acid it turns red, then brown and finally green. With sulphuric acid and potassium bichromate it turns green. With sulphuric acid and furfural water it turns orange. With vanadium sulphate it turns green, blue and finally violet (1 to 50,000). With Fröhde's reagent it turns blue, then violet and finally reddish brown (1 to 6,000).

*Ortho cresol* with sulphuric acid and potassium nitrate turns yellow, then green and finally orange. With sulphuric acid and potassium nitrite it turns yellow, then green, finally blue, rose or violet. With Fröhde's reagent violet streaks appear and the mixture turns later to a bluish green. With vanadium sulphate an olive green is formed. With sulphuric acid and potassium bichromate it turns orange and later olive green. With sulphuric acid and furfural water it turns orange and then violet.

*Benzo paracresol.*—With sulphuric acid and nitric acid this turns orange (1 to 1,000). With sulphuric acid and potassium nitrite it turns a dark reddish brown and later red (1 to 6,000). With sulphuric acid and ammonium molybdate it turns green, with blue streaks, and later turns blue. With Fröhde's reagent it turns a deep blue, then green and then brown (1 to 30,000). With vanadium sulphate it turns to a reddish violet rapidly changing to reddish brown.

(To be continued.)

#### SOAP POWDER.

(*Drogisten Zeitung.*)

	Parts.
Calcined soda.....	1,500
Powdered soap (ordinary washing).....	250
Powdered borax.....	250

### The Value of a Pharmaceutical Journal to the Pharmacist.\*

BY RICHARD H. KIMBALL,  
Hartford, Conn.

The real value of a pharmaceutical journal to a druggist may be said to depend largely upon whether the druggist is up to date or a back number. In these days of new remedies, new chemicals and new compounds, there is scarcely a week or a day passes but there comes a demand (either from the physician in the form of a prescription, or from some patron) for some new derivative of coal tar, some new chemical or some new principle which has been isolated. The druggist who is keeping up in the race wants to be posted about these things and able to answer all questions which may be asked him about them. The books of reference which he may have give no information. Where then shall he look? Why, to his drug journal, of course. The druggist who does not keep posted on these new things gets badly left in the race after pharmaceutical knowledge. What can be more annoying to a druggist who is not an old fogey or a back number than to have inquiry made for or about something which he is unable to furnish or give information? Often, yes, quite often, we are called upon by the physician to give information about some new chemical or compound, either its solubility, incompatibility, dose or physiological effects, all of which the physician ought to know, but the fact of his asking the druggist shows he does not. We are supposed to know all about these new things, and how much higher we stand in the estimation of the physician if we are able to answer his questions promptly than if we could not do so. If we are able to give information asked for, where do we get our information? From the pharmaceutical journals of the day. Are they valuable to me? Yes, of inestimable value. The pharmaceutical journals which I take (I wish I could take them all) are a source of very valuable information to me. My time is all taken up with the cares of business. There are but few leisure moments (in fact, leisure in the life of the druggist is one of the things which has to be taken in small doses), but I can take time to read my journals, and look forward with a deal of pleasure to their arrival. I find the time given to their perusal well spent, and the valuable information obtained more than repays me for the time and money spent in so doing. Then take into consideration the quotations and changes in prices of druggists' goods to be found in each issue, which to a careful buyer are of great value; also the formulas, suggestions in regard to conducting business, and articles published on various subjects, all of which are of great value to the druggist. I would as soon think of conducting or trying to conduct the business of the pharmacist without a pharmacopoeia, a dispensatory or other books of reference as without a pharmaceutical journal. The writer would urge upon every pharmacist, every assistant, every student, the great value of the pharmaceutical journals, and the imperative need of taking some of them; read them, and read them for information and knowledge, which will at some future time, if not at the present time, more than repay you for the time given to their perusal. In no way can you invest so small an amount and get such good and valuable returns.

\* Read at the meeting of the Connecticut Pharmaceutical Association.

\* This reagent consists of a solution of 0.1 gm. of ammonium vanadate in 10 ccm. of concentrated sulphuric acid. The reaction is carried out in the same manner as Fröhde's reagent.

## The Preparation and Preservation of Syrup of Ferrous Iodide.\*

By E. E. FISHER, PH.G.,  
Bridgeport, Conn.

The manufacture of this syrup has probably taken as much or more of the inquiring pharmacist's time as any other. The preparation of it in careful hands has been found comparatively easy. Numerous experimenters have evolved as many different ways to its preservation in order to carry it through the heat of summer and the cold of winter—through the different shades of light, from the time it is first put on the shelf in a nice clean bottle until it is pushed back, perhaps inadvertently, to become a neglected, dust-covered bottle.

The well known proneness of this syrup to become decomposed and discolored from oxidation and the separation of free iodine induced the writer to carry out several experiments, commencing some two years ago, to determine what ingredient would best prevent this action. Numerous suggestions were followed, such as keeping a little bright iron wire in the bottle, the use of hyposulphites and other deoxidizing agents, keeping in sunlight all the time, and others, but each had its objectionable feature.

The oxidation of iron and the separation of iodine are accelerated, according to one operator, by atmospheric oxygen, when the bottle is insecurely corked; but the change can hardly be prevented by changing the syrup to air tight bottles. It is not always convenient, either, to keep it in small bottles to fit prescriptions as they are received.

A sample of the U. S. P. syrup, carefully made six months ago and kept corked, showed, on examination, some free iodine, although the color had scarcely changed.

The addition of sodium hyposulphite to a colored solution is not always to be commended on account of the fine precipitate of sulphur which is thrown down and which cannot easily be removed; still it was found to be the best means of decolorizing old syrup. The addition of glucose has always worked well in my hands, though finally discarded on account of the increased density in the finished syrup.

In following the formula given below careful attention to every detail is enjoined. Take care to have the iron nice and bright and free from rust, the sugar as high grade as possible, and to use distilled water in all the manipulations.

Then, again, with the more care the writer has taken with the preparation of the syrup, the more handsome product has resulted. In some cases, and always with this syrup, I have brought the syrup to the boiling point, shaken well with animal charcoal finely ground, and immediately filtered. This brings out a fine sparkling syrup which of itself is gratifying.

The formula follows:

### I.

Iron wire.....gr 248½  
Iodine.....gr. 820  
Distilled water.....§ 1½-3½

### II.

Sugar.....§ xv  
Glycerin.....fl. 3iv  
Hot water, q. s. or.....fl. § vii  
Dil. hypophosphorous acid.....fl. 3j

\* Read before the Connecticut Pharmaceutical Association, at the Bridgeport meeting, February 5, and specially communicated to the AMERICAN DRUGGIST.

Prepare No. 1 as directed by the U. S. P. With No. 2, to the 7 ounces hot water add the sugar and dissolve by heat; then add the glycerin and strain while hot as directed above, with the addition of a little charcoal.

Put 10 fluid ounces of the hot syrup into a suitable container and pour on to it the hypophosphorous acid, taking care to have it cover the surface.

When the iron iodide solution is completed, according to the directions of the U. S. P., heat it to boiling and filter, having the funnel dip below the surface of the syrup. When filtered, wash with half fluid ounce each of water and syrup heated together. Shake the whole product and add a sufficient quantity of the syrup to make the whole product measure 16 fluid ounces. Shake well and keep in flint bottles in a place accessible to daylight.

The comparison of three samples of syrup made after this formula in February, 1894, which follows, will be of interest.

For comparison I have called them Nos. 1, 2 and 3.

No. 1 was kept tightly stoppered in diffused daylight. No. 2 was kept in diffused daylight and darkness, part of the time in each place, the cork taken out occasionally and in general treated carelessly. No. 3 was kept in direct sunlight, stoppered tightly. In January, 1896, nearly two years later, they were examined with the results stated.

Each was nearly the same color, if not quite that of newly made syrup. No. 1 had a slight white precipitate, weighing about 1-16 grain in 2 fluid ounces. No. 2 was perfectly colorless, and No. 3 had a very slight precipitate similar to No. 1. The addition of test solution potass. ferricyanide to each sample produced a light blue precipitate in each instance, showing ferrous iron salt. A little of each syrup was added to some gelatinized starch, which showed no change and proved the absence of any trace of free iodine; but on the addition of a few drops of chlorine water a deep blue color was immediately produced, showing a combined iodide. To a little of each sample was added some carbon disulphide and then shaken with a few drops of chlorine water. On settling, the carbon disulphide assumed a purple color, corresponding in each case to the test as recommended by the United States Pharmacopoeia. At the same time a sample of freshly made syrup was examined and the results were identical, showing no apparent difference in the syrup of nearly two years' standing.

## The Most Useful Medicines.

Dr. R. A. Bindley of Harlesden, England, informs the *Lancet* that as a result of Dr. Gower's address on the use of drugs, delivered before the Willesden and District Medical Society, the Executive of the Society have decided that there shall be a discussion at a subsequent meeting on a few of the drugs considered to be most useful in general practice. Each member was asked to send in a list, and from these lists the following drugs have been selected: Iodide of potassium, antipyrin, liquor arsenicalis, tinctura digitalis and liquor strychninae. It is a curious circumstance that none of these most useful medicines are to be found in the leading dozen most frequently prescribed medicines as determined by ourselves in 1886 and by W. Martindale

in 1894. Perhaps when the discussion comes on this month the speakers may be able to explain why they do not consider the following among the most useful drugs, as they certainly are found to be most frequently ordered by prescribers. The drugs are: Tinctura nucis vomicae, sodii bicarbonas, spiritus ammoniae aromaticus, quinae sulphas, vinum ipecacuanhae, potassii bicarbonas, ammonii bicarbonas and potassium bromidum. If there is no explanation we may conclude that usefulness and popularity do not go together.

## Preparing for a Board Examination.\*

By HENRY C. SOHRANCK, PH.G.,  
President Wisconsin Board of Pharmacy,  
Milwaukee.

To my mind the board stands between the ultra-scientific professor of pharmacy and the old-time druggist who would leave matters as they were years ago, who would dub the student a druggist who has for four years more or less industriously washed bottles, attended soda fountain, made tincture from fluid extracts and dispensed ready made pills and preparations. The boards stand between two extremes, and earnestly try to elevate pharmacy and continually encourage systematic study. In this endeavor the boards are ably assisted, firstly by our pharmaceutical journals and secondly by most of our schools, colleges and institutes of pharmacy. Now what course should students pursue to pass before the Wisconsin State Board of Pharmacy? Let me say right here that the young man who has received his certificate has not obtained all, nor reached the goal of his ambition.

### THE REQUIREMENTS OF THE LAW.

Simple enough. An assistant must be 18 years of age, have had two years' practical experience and have passed a satisfactory examination before the board. A licentiate must be 21 years of age and have had five years' practical experience, and passed a satisfactory examination before the board. The law is very severe on misstated or fraudulent representations, and gives the board the right to take away the certificate.

### HOW THE EXAMINATION IS DIVIDED.

In order to pass a satisfactory examination the board divides its examination into three distinct parts:

1. Written
2. Recognition of specimens.
3. Oral examination and reading of prescriptions.

1. THE WRITTEN EXAMINATION.—There are 80 questions; 10 each in pharmacy, materia medica and chemistry.

The questions in pharmacy relate to official, galenic preparations, giving ingredients (no proportions), *modus operandi* in making them, strength and testing (when possible) the quality. It expects the applicant to be acquainted with weights, measures, specific gravity, temperature. Describe the process of solutions, extracts, maceration, percolation, crystallization, precipitation, etc. To give examples of incompatibles, chemical and pharmaceutical, and by particular stress on dosology.

The questions in *materia medica* relate

\* Contributed to the Wisconsin Druggists' Exchange as a guide to the examination of the Wisconsin Boards



to drugs, official name, common name, part used, habitat, medical action, constituents, official preparations, strength, doses, and antidotes if poisonous. Of alkaloids, the mode of obtaining, dose, and antidote are required. The questions also include simple and easy botanical questions.

The questions in chemistry go over the field of general inorganic chemistry, a fair knowledge of the elements, where and how found, and the mode of obtaining or preparing; symbols, formulas, equations and simple chemical reactions.

2. RECOGNITION OF SPECIMENS.—Thirty samples are given, ten of which are pure drugs, ten chemicals, and ten official preparations.

3. IN THE ORAL EXAMINATION the whole field of practical and theoretical pharmacy is gone over, as they present themselves in reading of prescriptions. Attention is paid to overdoses, incompatibles, *modus operandi* in compounding the prescription and asking such questions as would likely be asked of an applicant for a position.

The board believes in a thorough practical test of the knowledge of the applicant and is decidedly opposed to all quiz compends. We are firm believers in practical experience under a competent pharmacist. We are continually raising the standard and now require 60 per cent. for assistants and 75 per cent. for licentiates in the general average, and reject all who come below 45 or 60 per cent. respectively in any one examination.

#### HOW TO STUDY.

Do not learn answers in quiz compends by heart. MAKE all your preparations strictly according to the Pharmacopœia.

Take every drug, chemical, examine it carefully so that you can recognize it again. Take your text-book and read all about the article in question. In your manipulations follow Remington or any good work on pharmacy, supplement it with practical experiments so that your mind is firmly impressed with weights, specific gravity, filtration, percolation, etc.

AS TO BOTANY.—On your afternoon out, go into the fields from early spring to late autumn, examine plants, learn to know the technical terms, learn to analyze plants; you will soon be able to tell what natural order a plant belongs to by simply looking at it, and ere long you will be acquainted with the flora of your immediate neighborhood. If you are not delighted with your trips—then you will never be a pharmacist. Chemistry can be studied just like pharmacy in your workshop or laboratory. That in all studies the advice and guidance of a preceptor or fellow druggist is of the utmost importance is self-evident.

#### TEXT-BOOKS.

First, last and all the time the Pharmacopœia; Remington's and the National Dispensatory; Attfield's Pharmaceutical Chemistry, and Gray's Botany are sufficient.

#### WHO CAN PASS THE WISCONSIN BOARD?

Any one who has a common school education can, if he has a love for his profession and desires to become a true pharmacist, master the above examination easily if he devotes the leisure time of his two or five years of practical experience to study.

The object and intention of the board

is to pass every one who has applied himself conscientiously to his studies, and we believe we can determine quickly whose answers were obtained by quiz compends or those who have by persistent, honest work fitted themselves to follow the responsible profession. We recognize no college, and only in exceptional cases do we grant a certificate if the candidate has passed some other board, where the requirements are similar and where an average of above 80 is shown. My own observations are that those who have passed a satisfactory examination before a board and then enter some recognized college can obtain their diploma easily and are the most sought after; they not only always command a position but are sure to receive the highest remuneration. We encourage all, even though they fail more than once, and try to impress on them that no reverses or failure should daunt their onward career; that all their actions must be governed by the one impulse and idea—the advancement of the profession of our choice.

### The Toilet Water Business.\*

BY H. L. GRIMES, PH.G.

The desire for luxuries seems inherent with nine-tenths of the people, especially the gentler sex, and there is nothing that goes further toward satisfying this desire than the use of some refreshing toilet water in the bath. There is a growing demand for this class of goods, and as the margin of profit is good, particularly if you make them yourself, it is to the druggist's interest to give this part of his stock more attention than it generally receives. It is necessary, of course, to keep in stock such toilet waters as are advertised and well known to your customers, but a supplemental line of your own goods will find a ready sale at such prices as you wish to establish, regardless of cutters and outside dealers.

One of the best methods of introducing a line of toilet waters of your own make is to put up samples in 1 or 2 dram homœopathic vials neatly labeled. When you wrap up a parcel of goods for a lady customer, include one of the samples, call her attention to it and ask her to kindly compare your sample with any she has used. It is also a good plan to supply the first-class barber shops in your neighborhood with liberal samples, say a 2-ounce bottle of any one water, or two 1-ounce bottles, each containing a different water. The best shops use considerable quantities of such preparations, and by a little push at the start, the druggist can supply the goods and make the profit which now goes to the barbers' supply houses.

A secondary benefit to be derived from the introduction of your toilet goods to the barbers is due to the proverbial penchant the knights of the razor have for conversation, and, as one topic is as good as another about the barber chair, your goods will be likely to receive favorable comment and be recommended by the shaver almost every time he applies them to a customer's face.

To give formulae for a complete line of toilet waters would require more time and space than are at our disposal in this article. We append formulae for two preparations that prove popular with a discriminating trade and yield a satisfactory profit.

\*The Spatula.

#### LAVENDER WATER.

Oil lavender flowers.....2 drams  
Alcohol.....1 pint  
Rose water.....6 fl. ounces  
Magnesium carbonate.....¼ ounce  
Caramel, sufficient to color.

Rub the oil with the magnesium carbonate, add the alcohol and rose water, then sufficient caramel to give a light brown color. Filter through paper.

We have seen lavender water that was without color except the slight shade imparted by the oil, but the color given by the caramel impresses the eye as an indication of strength in the preparation. The color may be omitted if preferred.

A superior article that takes the place of ordinary bay rum is made as follows and sold under the name

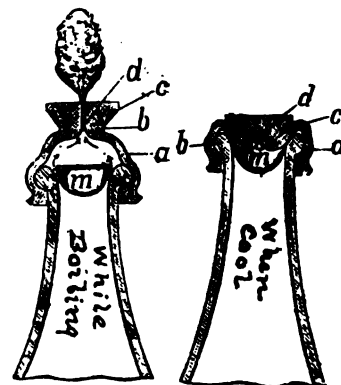
#### ORGEAT RUM.

Essential oil of almonds.....32 drops  
Extract vanilla.....1 fl. ounce  
Alcohol.....12 fl. ounces  
Water, sufficient to make 2 pints.  
Tinct. cudbear, enough to color.

Dissolve the oil in the alcohol, add the extract vanilla, water and tincture cudbear. Shake well. If not perfectly clear, rub with a little carbonate of magnesia and filter through paper. As a rule it does not require filtration. This rum can be profitably sold at 50 cents per pint.

### Bottle Stopper for Sterilization.

J. Schäfer has patented in Germany a bottle stopper, which is shown in the accompanying illustrations, for use in sterilization, which is intended to do away with the disagreeable odor which results from the contact of rubber with the milk or other liquid contents of the bottle. The stopper consists of a cap, M,



made either of tinfoil, parchment, porcelain or glass, which is laid in the mouth of the bottle in such a way that it allows of the exit of the steam which is generated in the bottle during sterilization. The exterior stopper is composed of rubber, and when the sterilized bottle begins to cool the external pressure causes the outer stopper to collapse in the shape shown in Fig. 2 and hold the inner stopper fast.

#### VIAU'S MOUTH WASH.

(Pharm. Centralh.)

Salicylic acid.....1 dram  
Chloroform.....10 drams  
Tincture of benzoin.....10 drams  
Tincture of cinnamon.....10 drams  
Alcohol (aromatic).....130 drams

## NOTES ON PRACTICE.

The Edinburgh, Scotland, Chemists' Assistants' and Apprentices' Association, at the January meeting, listened to an interesting communication by William Lyon on some new methods and work. The first paper was on an

## IMPROVED FORMULA FOR BLAUD'S PILLS.

The author has made a series of experiments with the view of reducing the size of Blaud's pills. The official formula is a very satisfactory one, so far as massing and keeping properties are concerned, and it has been taken as a standard during the experiments. After many trials the following formula was found to be equal to the B. P. pill in every respect and the bulk is a fifth less.

Dried potassium carbonate.....30 grains  
Dried iron sulphate.....38 grains  
Powdered sugar.....15 grains  
Powdered tragacanth.....3 grains  
Glycerin.....2 minims  
Syrup.....10 minims or a sufficiency

By using carefully dried iron sulphate, pharmacists may rely on this formula giving a pill mass which will meet every test that can be applied to the B. P. mass. Pills made as above can be readily varnished with ethereal solution of tolu residue. Another method which gives a nice result is to moisten the surface of them in finely powdered wood charcoal and when dry varnish with tolu solution. Thus treated they have a nice glossy black appearance, and the gradual oxidation of the pill is not observed by the patient.

## THE MASSING OF COMPOUND COLOCYNTHE PILLS.

So much has been written about the pill at one time or another that it seems superfluous to tackle it again. This note, however, draws attention to the suitability of aromatic spirit of ammonia as a massing agent. During the summer months the author subjected it to prolonged trials, and came to the conclusion that it was far superior to any agent he had tried. After being kept for nearly six months the pitting was scarcely perceptible, a big contrast compared with the present B. P. pill. Unfortunately, however, for the adoption of sal volatile as a massing agent, the B. P. pill is very frequently prescribed along with calomel, which undergoes decomposition in the presence of a salt of ammonia, and this constitutes a strong argument against it being included in a new Pharmacopoeia, and restricts its usefulness at the dispensing counter.

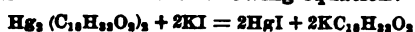
## REACTION BETWEEN OLEATE OF MERCURY AND OINTMENT OF POTASSIUM IODIDE.

Some time ago the following prescription was handed in to be dispensed:

Hydrarg. oleatis.....3j  
Ung. potass. iodid.....3vj  
Misc. Sig. The ointment.

In mixing this it assumes a bluish color, which quickly changes to dirty brown, but on standing for a day or two the color gradually disappears and it remains yellowish-white. The reaction is, of course, a well known one, but I thought it might be of some interest to the younger members of the association if a few experiments were made by way of explaining to them what takes place.

In the first place, when oleate of mercury and iodide of potassium come together double decomposition takes place, as indicated in the following equation:

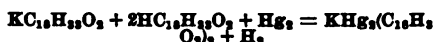


If the oleate and the ointment are slowly mixed, the greenish yellow color of the mercurous iodide may be readily noticed.

In the second place, mercurous iodide in the presence of potassium iodide (and the above proportions give an excess of potassium iodide) undergoes decomposition, the double iodide of mercury and potassium being formed and mercury liberated.



If the fat is washed out of the ointment the mercury will be found. The next reaction that takes place results in the disappearance of the mercury in the free state. Though the few experiments I have had time to carry out are not conclusive on the point, still they indicate that the final change that takes place in the ointment is probably shown in the following equation:



When the proportions of the oleate of mercury and the ointment of iodide of potassium are altered, the reactions are gradually lessened as the proportions approach equality, thus:

## II.

Hydrarg. oleat.....3ij  
Ung. potass. iodid.....3vj

On mixing it assumes a bluish color darker than the former. After a day or two yellowish-green spots are seen on its surface. On further keeping it becomes yellowish-white, darker than the former.

## III.

Hydrarg. oleatis.....3iij  
Ung. potass. iodid.....3v

In this case the reaction is somewhat similar to II., except that the final color is not yellowish-white, but reddish-yellow (a mixture of mercurous and mercuric iodides).

## IV.

Hydrarg. oleat.....  
Ung. potass. iodid.....ss 3iv

The bluish color, which is found on partially mixing, is quickly changed to bluish-green, and finally to yellowish-green (mercurous iodide). The samples shown have been kept for nearly three months.

## Thyreolodine.

While the thyroid gland in various forms has been very widely used of late years, and with excellent results, there has heretofore been but little effort made to isolate and study the active constituents of the gland. Fränkel recently advanced the theory that the active principle was not an albuminous body and that it has the formula  $\text{C}_2\text{H}_{11}\text{N}_5\text{O}_4$  (*Apoth. Zeit.*, 1895, 104, 105).

Prof. G. Baumann now makes the very important communication (*Zeit für Physiolog. Chem.*) that he has isolated from the thyroid gland of the sheep a body containing a large proportion of iodine, which he has given the name of thyreolodine. In addition to the iodine phosphorus is present in the new substance. According to the *Pharmaceutische Post* the method of preparation is as follows: The glands, previously cut up fine, are boiled for several days with a 10 per cent. solution of sulphuric acid; this causes the separation of a fine flocculent precipitate, from which the active prin-

ciple is obtained by repeated boiling with 85 per cent. alcohol. The residue of the alcoholic solution, after evaporation, is dissolved in soda solution and filtered, diluted sulphuric acid added and a brown amorphous substance is then precipitated, which, according to Dr. Roos, is quite as efficacious in the treatment of goitre as is the thyroid gland itself. Baumann has found iodine in this compound beyond any possibility of doubt, and has even separated the iodine from its organic combination and procured it in the free state. Baumann has also discovered small quantities of this substance in two goitres. Iodine has never been discovered before in the human body, and the discovery of such a rich deposit of iodine in a single organ of the body was totally unexpected. It appears that a specific organic compound of iodine is formed in the thyroid gland and that this enters the general organism as required from time to time. The discovery of iodine in the thyroid gland is particularly interesting, in view of the fact that iodine has always been used in the treatment of goitre, both by external application and internally.

## To Prepare a Transparent Mirror.

The following process (*Neaste erf u. erf.*) for producing a mirror which reflects from one side but is transparent from the other, has been patented in Germany: Dissolve 1 part by weight of silver nitrate in 10 parts by weight of water and label No. 1. Prepare another 10 per cent. solution of silver nitrate, but in larger quantity; to this add ammonia water, drop by drop, stirring carefully until the precipitate formed at first is completely dissolved, and label No. 2. Now add solution No. 1 to solution No. 2 until the odor of ammonia is no longer recognizable and the liquid has again become very turbid. Now add 100 parts by weight of distilled water for every part of silver nitrate originally used in solution No. 2, and filter until clear. Label this No. 3. Prepare a reducing solution by dissolving 0.8 parts by weight of Rochelle salt in 884 parts by weight of distilled water, boil, and to the boiling solution add gradually a solution of 8 parts of silver nitrate in 10 parts by weight of distilled water, and filter when cool, and label No. 4. Clean the glass to be coated thoroughly, lay it on a perfectly level surface in a room at a temperature of about 25 degrees C. (77 degrees F.). Mix equal parts of No. 3 (the depositing fluid) and No. 4 (the reducing fluid) and pour over the glass. The glass may, if preferred, be dipped into the solution. The time required for the deposition of the layer of silver of just the correct thickness has to be determined by the judgment of the operator in each case, and this may be aided somewhat by observing a piece of white paper below the plate of glass. When a sufficient deposit of silver has been made, and much less is required than for an ordinary mirror, pour off the silvering liquid and rinse thoroughly with the distilled water, and stand the mirror on edge to dry; coat the silvered side with a solution of colorless shellac in alcohol and finally frame the mirror with a backing of clear glass to protect the mirror surface from being scratched. Mirrors so prepared, being transparent from one side, would be valuable in front of the prescription counter.

## The Influence of Certain Medicinal Compounds on the Character of the Urine.\*

BY FREDERICK W. HAUSSMANN, PH.G.,  
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The examination of urine for abnormal ingredients, in particular albumin and sugar, involves frequently questions of considerable delicacy.

To the analyst, examining insurance cases, and to the practical physician, the presence of traces of these compounds is an important matter, and it is at times difficult to express a decided opinion upon the normal or abnormal condition of the secretion.

Normal urine possesses the property of responding feebly to a number of reactions for glucose, and the percentage of the reducing principles, estimated by the various methods as given by different authorities, is found subject to variations. The fact that Fehling's solution is reduced and other reactions for glucose respond to a greater or less degree, by urine passed after the administration of a number of internal remedies, has only received attention in recent years, and while much remains to be learned on the subject of their elimination, in many instances we are able to foretell the occurrence of such reactions.

### VARIATIONS IN RESULTS.

In the composition of such urines we notice, however, peculiar variations.

A number will respond to every commonly employed reaction for glucose, some only to certain tests, while with the others entirely negative results will be obtained.

For instance, in urine passed after the administration of chloral hydrate, we have both the Moore-Heller reaction for glucose with alkaline hydrates, also the reducing action upon Fehling's solution, while to Boettger's bismuth test the urine will not respond.

Similar results are found in a number of instances.

The reducing power of such urines also varies considerably, some possessing this property feebly, while others reduce alkaline cupric tartrate solution readily, so that a suspicion of diabetes can be entertained, unless further inquiry is made.

To understand the reason for this action, so closely allied to that of glucose, it is necessary to briefly dwell upon the metamorphoses of such compounds in the human organism as far as known.

If we examine many of the remedies, after the administration of which the mentioned properties of the urine are found, it is found in most instances that their action upon glucose reagents is entirely negative. Careful research has revealed the fact that compounds are formed with glycuronic acid, a substance which has many properties in common with dextrose or ordinary grape sugar. These compounds possess a number of peculiar properties, both in chemical behavior and their action upon polarized light. In our subject, their action upon glucose reagents is of primary importance.

In normal urine a glycuronic compound is stated to exist, the indoxyl glycuronic acid, to which some of the reducing action of the secretion is due.

Again, in the examination of glycuronic

urine in general, it must be remembered that other urine constituents also possess a similar action. Such are uric acid, creatinin and probably other compounds of which we possess a limited knowledge. The reduction of these compounds takes place at a higher temperature, in some only after prolonged boiling, which property may form a point of distinction from diabetic urine.

In the following statement the writer will chiefly dwell upon such urine which came under personal observation, adding a few data collected from different works on urine analysis.

### CHLORAL URINE.

The peculiar action of this secretion upon glucose reagents has already been mentioned. Chloral hydrate is rarely found as such in urine, at best only in traces, and is eliminated as urochloralic acid. This compound turns polarized light to the left, a common property of glycuronic compounds, reduces Fehling's solution, has the same action upon indigo-sulphuric acid as glucose, but does not respond to Boettger's solution.

Material increase of the specific gravity of the secretion does not seem to take place, which forms a distinguishing feature from diabetic urine.

In the pale urine of a delirium tremens case, in which chloral was administered in large doses, the amount of Fehling's solution reduced by the eliminated urine corresponded to 0.4 per cent. of glucose.

In the light-colored specimen, with the specific gravity of 1.022, of a patient who had taken 60 grains of the drug, administered within two days, the amount of reduction corresponded to about 0.15 per cent.

This case was kept under observation, the urine being examined before and after the ingestion of chloral.

The reduction took place only during the administration of the drug.

A singular fact is that in chloral urine the Braun-Johnson picric acid and potash test do not react. This, together with the non-action of the bismuth test, is remarkable.

### OROTON CHLORAL URINE.

Regarding butyl chloral urine, conflicting statements are found. According to some writers, it will reduce Fehling's solution, while according to Nebauer and Vogel, butylchlorallic acid, under which form the drug is eliminated, possesses no reducing action upon cupric or other metallic oxides in alkaline solutions.

In one sample examined by the writer the reducing action found was slight, by no means as prominent as in the case of chloral urine.

### CHLOROFORM URINE.

In connection with chloral urine, it may incidentally be mentioned that urine containing chloroform will also reduce Fehling's solution.

The distillate from a specimen of this kind reduces ammoniacal silver nitrate solution, while in the distillate from urine containing acetone no such action takes place with either reagent.

### TURPENTINE URINE.

The urine voided after the administration of oil of turpentine has repeatedly been the subject of investigation. The peculiar odor communicated to the secretion by this drug has been described as resembling that of violets, although the original terebinthinate odor is fre-

quently noticeable, especially upon the addition of mineral acids.

In examining turpentine urine for abnormal ingredients, a knowledge of the physiological action of the oil is important.

**Albumin Reactions.**—Turpentine urine is not infrequently found to respond readily to albumin tests. This may be due to a temporary albuminuria produced by the drug, the latter possessing the property of causing strangury and occasionally bloody urine. In such cases the presence of albumin is transient, disappearing with the suspension of the drug.

Again, so-called resin acids make their appearance in the urine after the ingestion of turpentine, also manifesting themselves upon the application of certain tests for albumin.

The amount of albumin found in such urine varies apparently with the amount of the medicine administered; but it is in some instances surprising how small a quantity of turpentine will produce a temporary albuminuria. Other factors, which are liable to cause nephritic disturbances, independent of the action of the oil, must, however, also be considered, such as febrile albuminuria or incipient Bright's disease.

A special examination was made in a case where opportunity was offered to study the effect of the drug upon the urinary secretion. The urine of the patient, before the administration of turpentine oil, had a normal specific gravity, and bore no evidence of either albumin or sugar.

Six drams of the oil were administered in 48 hours, at the end of which a specimen of the urine was examined. The same had an acid reaction, the characteristic odor, a brown-red color, and a specific gravity of 1.082.

The examination for albumin gave the following result: Albumin was found by the heat test, nitric acid and picric acid contact methods, acetic acid and potassium ferrocyanide reaction. Tanret's test, and with concentrated magnesium sulphate solution in the presence of acids (Roberts' test).

Three days after stopping the medicine the urine was again examined, the physical properties being nearly the same, the specific gravity, however, only 1.025. Traces of albumin were still found, but the reactions were more feeble.

Similar results were also obtained in the examination of other specimens of turpentine urine.

The resin acids mentioned may coexist with the albuminuria, and, upon the application of reagents may also be precipitated. Their difference from albumin is shown by their solubility in alcohol.

**Physical Properties.**—The color of turpentine urine is usually deep red, independent of the fact that blood may be present. The color continues some time after ceasing the administration of the oil. The specific gravity, in the writer's experience, is increased, the increase continuing for some time. The reaction is, in most cases, strongly acid.

**Sugar Reactions.**—Turpentine urine will also respond to the commonly employed reactions for grape sugar. This is due to terpenglycuronic acid, which has the property of reducing Fehling's solution.

The high specific gravity of such a specimen of urine may have the tendency to cause one to suspect a diabetic condition, although the red color of turpentine urine differs from that present in diabetes.

\* Read at a pharmaceutical meeting of the Philadelphia College of Pharmacy.

The amount of oil of turpentine ingested apparently influences the reducing power of the urine. For instance, in the specimen mentioned above, the amount of Fehling's solution reduced corresponded to a glucose percentage of 0.5, while in a case where 240 minims of oil of turpentine were administered in two or three days the amount corresponded to 0.25 per cent. of glucose.

In the former specimen, after the medicine was stopped for four days, the amount of reduction corresponded to a glucose percentage only of 0.1 per cent.

Marked diminution in the specific gravity also took place in this instance.

**Other Glucose Tests.**—Besides reducing Fehling's solution and responding to Trommer's test, turpentine urine will also give decided glucose reactions with Boettger's and Nylander's bismuth tests and the Braun-Johnson's picric acid and caustic alkali method.

The bismuth tests respond with the same rapidity as a grape sugar solution, while the deep mahogany color of the picramine test of Braun was readily developed on boiling.

It may be stated that the two tests mentioned last cannot be relied upon in most glycuronic urines. Examination of the different specimens of turpentine urine, after removing the reducing glycuronic compound by means of basic lead acetate, showed the same to be perfectly free from glucose.

Incidentally, it may be mentioned that pure oil of turpentine, examined with various glucose reagents, showed no reducing power whatever.

#### OTHER REMEDIES.

In connection with the foregoing, it may be stated that a number of other remedies produce similar reactions when eliminated by the kidneys.

Copaiba and its oil behave similarly to oil of turpentine when being examined for albumin.

When examined for the latter, the urine may reveal the presence of resin acids, and the same means, their solubility in alcohol, will furnish the point of distinction.

Incidentally, it may be mentioned that, after the administration of a large dose of cubeb and its preparations, an identical result is said to take place.

It may likewise be surmised that many remedies of a balsamic nature are liable to produce this effect.

Copaiba urine will also reduce Fehling's solution, but, according to Quincke, will not affect the bismuth tests. It is readily distinguished by its characteristic odor and the red or purplish color it develops when mixed with hydrochloric or other concentrated acids.

The numerous synthetical organic compounds introduced into medicine within the last few years furnish a large field for research in urine analysis.

The elimination of a number in the urine as glycuronic compounds has been studied, but many require further investigation.

They possess the peculiarities referred to in their action upon polarized light, being all laevogyre, as well as the reducing action upon glucose reagents.

Some, however, do not reduce the mentioned test liquids. Such are phenylglycuronic and camphoglycuronic acid, eliminated after the administration of carbolic acid and camphor, and the compounds formed after the ingestion of antipyrine and other remedies.

Among a number which exert a reduc-

ing action, a few deserve prominent mention.

Such are acetanilid or antifebrin, kairin, morphine, nitrobenzol and bitter almond oil, benzoic and salicylic acids, and their respective salts, together with others of more or less importance.

#### ACETANILID URINE.

This deserves, perhaps, more than passing notice. Urine passed after the administration of this compound readily reduces Fehling's solution and responds to most other sugar tests.

It is usually of a red color and increased specific gravity.

To physicians such urine is of considerable interest, also to the insurance analyst, if it is considered to what extent the drug is consumed in the form of the many popular headache and neuralgia remedies.

The popular effervescent headache cures, to the baneful influence of which many are addicted, will furnish us with this source of error, as well as the nostrums, principally composed of acetanilid, which enjoy the patronage of many physicians.

Acetanilid is eliminated in the urine as para amido phenol glycuronic acid.

According to Le Nobel, Nylander's bismuth test, to which acetanilid urine responds, reacts in a similar manner to glucose, also with urine passed after the administration of kairin, tincture of eucalyptus and large doses of quinine, giving a black precipitate.

#### CHRY SOPHANIC ACID URINE.

Another urine which cannot be strictly classed with the glycuronic, although it possesses a number of their properties, is chrysophanic acid urine, eliminated after the administration of rhubarb and senna.

This has been considerably treated upon recently, and a number of methods have been proposed to detect this principle in urine.

The statement has been made by some writers that such urine possesses the property of reducing alkaline copper tartrate and alkaline bismuth solutions.

**Physical Properties.**—Chrysophanic urine is of a yellow, sometimes greenish-yellow color, gradually turning darker as the urine undergoes decomposition.

It is characterized by the red color developed with alkalies, although the urine eliminated after the administration of santonin is said to possess the same property. The red color thus produced is again changed to yellow by the subsequent addition of acids.

Outside of its similarity in color, chrysophanic urine possesses none of the characters of urine containing bile, or, perhaps, only when the precipitation method by means of alkaline earth bases is employed, when, however, other distinguishing features prevail.

**Comparison with Glucose Tests.**—It is questionable whether the so-called reduction of copper tartrate or alkaline bismuth solution, by means of chrysophanic acid urine, is due to the inherent property of this principle.

Such urine, no doubt, has the property of slightly reducing Fehling's solution, but the reduction is probably due to other urine constituents, perhaps glycuronic compounds.

Even chrysophanic acid, extracted from rhubarb, has a feeble reducing power upon alkaline cupric tartrate solution.

To determine this point the writer prepared chrysophanic acid from rhubarb, subjected it to the commonly employed sugar reagents, and compared with the substance commercially known as chrysophanic acid the chrysarobinum of the Pharmacopoeia.

The following differences were noticed:

The acid prepared from rhubarb in a saturated aqueous solution gave, with alkalies, a purple color, while a similarly treated chrysarobin solution became deep red.

The reducing action of the former upon Fehling's solution was extremely slight, while with the latter precipitation of red cuprous oxide took place.

In the rhubarb acid, the blue of the copper solution was turned purple, with chrysarobin a red color.

Several other differing points were also observed.

In the examination of chrysophanic urine, in view of the action of alkalies upon this principle, the important fact must be considered that, with few exceptions, all tests employed for the detection of glucose take place in alkaline media.

It is therefore likely that the action of alkalies upon chrysophanic acid—namely, the red coloration—may take place in such urine.

As many glucose tests are based on similar color reactions, this may prove a source of error in examining for small quantities of glucose.

The writer subjected various samples of chrysophanic urine, both natural and artificially prepared, to a number of sugar tests to study their effect.

1. Moore Heller test (heating with alkaline hydrate solutions).—Purplish red color, differing from the brown produced in the presence of grape sugar.

2. Rubner's or O. Schmidt's test.—This consists in treating the urine with lead acetate solution, filtering, and treating the filtrate with ammonia.

A white precipitate of lead saccharate is formed, which, if glucose is present, will assume a flesh or red color on boiling.

Thus employed, this test will not be affected by chrysophanic acid urine, as the lead salt will precipitate the latter. But if the following modification is employed a different result may take place:

Three grams of lead acetate are dissolved in 10 ccm. of urine, by heat, filtered, and the still hot filtrate treated with ammonia.

On heating the mixture to boiling the above-mentioned color will be developed in the presence of glucose.

In following this method with chrysophanic acid urine, part of the acid does not seem to be completely precipitated and to pass into solution, when, upon the addition of ammonia, also a red color will be produced, as in the case of glucose.

Some care is therefore necessary in employing this test.

8. Reaction with copper solutions.—The usual method for the examination of urine for sugar consists in observing the action upon boiling diluted Fehling's solution.

If chrysophanic acid urine is added in this manner, the blue of the alkaline copper solution is turned to a reddish-brown, occasionally a purple color.

The usual reaction is the following:

Upon first addition of the urine the blue color is changed to purple, gradually turning reddish-brown upon the further addition of the urine.

The amount of the principle present influences the reaction to a considerable degree, however.

4. The bismuth tests.—Boettger's and Nylander's alkaline bismuth tests, when applied to chrysophanic urine, respond in a manner somewhat similar to glucose.

On boiling such urine with the alkaline bismuth mixture of Boettger, it assumes a purple color, while the precipitated bismuth salt will be blackish-gray.

A similar result takes place, according to Salkowski, in Nylander's modification, a blue-black precipitate being formed.

5. Sachs's solution is used for the quantitative estimation of glucose.

It consists of solution of potassium iodohydrargyrate, with a considerable excess of alkali.

The solution is reduced to metallic mercury in the presence of glucose.

For a reliable sugar test in urine it is not adapted, as this secretion is liable to reduce it when glucose is absent. In chrysophanic urines this result takes place readily, the supernatant urine after the precipitation of mercury possessing a red-brown color.

It resembles in this respect diabetic urine; due to the large excess of alkali in Sachs's solution, the sugar is sometimes caramelized, and the mixture will have a brown color.

The same results may be expected in Knapp's alkaline mercuric cyanide solution.

6. The picric acid and potash method of Braun and Johnson is also liable to produce a dark color, as with glucose, when applied to chrysophanic urine, due to the action of the alkali upon the acid.

In this test, however, no dark red color is produced unless the other reducing constituents of urine are factors also. The yellow picric acid evidently retards the formation of the deep mahogany color produced in the case of glucose. But if the urine be rich in chrysophanic acid the alkaline mixture will also turn quite dark on boiling.

Several other tests are open to the same objection—namely, the action of the alkali upon chrysophanic acid, when applied to such urine.

This may be the case, for instance, in Penzoldt's diazobenzolsulphonic acid reaction in the presence of strong alkali, the purple color produced by the latter in chrysophanic urine being liable to be mistaken for the red-blue tint produced in diabetic urine.

*Source of Error in Diabetic Urine.*—We have, so far, considered the liability of chrysophanic urine to be a source of error in examining healthy urine for small amounts of glucose.

But it can also interfere in diabetic urine, and, in some cases, retard the accuracy of certain tests.

In such cases it must be supposed that rhubarb or similar medicines have been administered to a diabetic patient, or one slightly suffering from glycosuria.

Some of the recently introduced tests for glucose, also acting in alkaline media, depend upon decolorization of the test liquid, the glucose present acting as reducing agent. One of these tests is Crisaler's reaction with safranin. This is, for ordinary purposes, an excellent reaction, where an accurate quantitative estimation of glucose is not desired. This test is applied, according to Allen, as follows: Equal measures of urine (2 ccm.), of normal KOH or NaOH solution, and a solution of safranin, 1 part in 1,000 parts of water, are mixed.

The mixture is heated in a test tube, avoiding agitation as much as possible, till freely boiling.

If the urine contains more than 0.1 per cent. the liquid is decolorized; otherwise the red color remains intact or is only partially discharged.

If the color is destroyed the test may be repeated with twice or three times the volume of the safranin solution, which represents roughly 0.1 per cent. of sugar.

If more than four or five measures are required the urine is diabetic.

If this test is applied to a chrysophanic urine containing a small percentage of glucose complete decolorization of the mixture does not take place, due to the action of the alkaline excess upon the chrysophanic acid.

The urine must, however, contain a considerable amount of the latter, or else no material difference is noticeable.

In specimens rich therein this interfering action can be plainly observed.

Another test dependent upon decolorization is based upon the fact that potassium ferricyanide, commonly known as red prussiate of potash, in alkaline solution, is changed to ferrocyanide in the presence of glucose.

It has, however, been shown that uric acid also has the same effect.

To this may be added that, in chrysophanic urine, possibly containing sugar, no such decolorization takes place.

The excess of alkali will color such urine red, which is not destroyed even upon the subsequent addition of glucose.

The reliability of this reaction as a sugar test is therefore open to criticism.

Chrysophanic urine is stated to be eliminated after the administration of rhubarb and senna.

Even the external application of chrysarobin, according to Rosenthal, is stated to produce it in the urine.

In the experience of the writer, after the administration of large doses of cascara sagrada urine is eliminated which has properties similar to chrysophanic urine, although apparently to a less degree than that produced by rhubarb.

After large doses of aloes the urine sometimes turns darker upon the addition of alkalies, and it was found not to be due to glucose.

Perhaps similar reactions to those described may be obtained with principles which pass through the kidney and give color reaction with alkalies.

As previously mentioned, santolin is stated to possess this property, but to what extent it may influence the reagents mentioned the writer is unable to state, as, so far, he has been unable to procure a specimen of santolin urine.

#### SEPARATION OF CHRYSOPHANIC ACID.

It may be desirable to remove the interfering chrysophanic acid for the further examination of such urine samples. This is best effected by precipitation with basic acetate of lead solution, which, besides the acid, removes also glycuronic compounds.

Subsequent removal of the excess of lead by means of sulphuric acid, and subsequent examination in the usual manner for glucose, becomes necessary.

Animal charcoal will also remove chrysophanic acid from urine.

In presenting this paper to the meeting the writer is conscious of the fact that many of the points briefly dwelt upon are deserving of more exhaustive treatment. The object has been to call attention to an important matter which

offers a field for interesting research and of which our knowledge at present is at best limited. The pharmacist can aid scientific investigation in physiological chemistry by a careful scrutiny of different prescriptions, and considering the probable elimination of the prescribed drugs.

By calling the attention of physicians, who can procure samples of urine more readily than the pharmacist, to the importance of this matter, interest can be created and much valuable information can be obtained.

If this receives careful attention and study a systematic treatise upon the elimination of drugs can be expected in a short time.

#### Digestive Ferments.\*

By F. CASSON.

The word "ferment," the author said, is derived from *fervere*, to boil, and was formerly applied to those cases in which a liquid or semi-liquid mass was seen to become puffed up and disengage gas without any apparent cause, that is—without any cause that could be understood and explained.

The meaning of the term has been much extended, until at the present day we mean by fermentation those chemical changes which take place in a substance through the agency of a body derived either from the animal or vegetable kingdom, termed a ferment. This ferment remains the same, qualitatively, both before and after the reaction. Hence we class many bodies as ferments to which the word ferment, as meaning a "boiling," is misapplied. All ferments possess three properties:

1. They are nitrogenous organic substances.

2. They are unstable—heat, acids, etc., readily destroying them.

3. A relatively small quantity is capable of producing great changes in the body acted upon, especially if the products of the change be removed.

Ferments can naturally be divided into two great classes:

#### THE FORMED OR ORGANIZED FERMENTS.

These have a definite organized structure, and are capable of independent growth and multiplication. They include:

- (a) The Moulds.
- (b) The Saccharomycetes or Yeasts.
- (c) The Schizomycetes or Bacteria.

#### THE UNFORMED OR SOLUBLE FERMENTS.

These have no organized structure or power of multiplication. They include among others:

- (a) The Diastasic ferment.
- (b) The Peptic ferment.
- (c) The Rennet ferment.
- (d) The Pancreatic ferments.

The action of the first class appears to be due to the presence of one or more living cells in a body; the action of the second may be traced to the molecules of which they are composed, and which are the carriers of the chemical force that causes the changes. The second class of ferments will only be dealt with here.

#### DIASTASIC FERMENTATION.

The best known instance of this occurs in malt-extract. If a solution of malt

\* Abstracted from a paper read before the Midlands Chemists' Assistants' Association January 8.



extract be heated to about 80 degrees C. with its own weight of starch in solution, the starch is completely converted in a few minutes into maltose and dextrine, and ceases to answer the iodine reaction. The diastasic fermentation occurs to a small extent in the saliva. The diastasic body may be obtained by filtering saliva and mixing with five or six times its weight of alcohol. The very slight precipitate which falls is dried at the temperature of the air. It has a strong diastasic action.

#### PEPTIC FERMENTATION.

This fermentation takes place in the stomachs of animals when food is digested, and the stomachs are the sole source of pepsin.

Various theories of digestion have been advanced from time to time—that the changes were due to heat only, to grinding only, or to the action of strong acids, etc.

Gastric juice exudes when the surface of the stomach is touched. It is usually colorless and always acid in reaction. Human juice has a sp. gr. from 1.001 to 1.010, and contains less than 1 per cent. of solid matter. On boiling, it is not coagulated, but its power is totally destroyed. It may be kept for months unchanged.

The power of gastric juice in dissolving proteids may be traced to the pepsin it contains, which can only act in the presence of an acid, preferably hydrochloric.

#### THE PREPARATION OF PEPSIN.

The British Pharmacopoeia directs that the mucus membrane of the stomach be, after washing, simply scraped off and dried. Pepsin can readily be obtained purer, and therefore stronger, than by this method. Wassman dissects off the mucus membrane and treats repeatedly with water at 80 to 40 degrees C. The liquors are mixed, precipitated with lead acetate, the precipitate collected, suspended in water and sulphuretted hydrogen passed through. The filtrate is concentrated and alcohol added to precipitate pepsin.

Another method is to exhaust the stomach and mucus membrane with weak acid and saturate the solution with salt. A scum rich in pepsin rises to the surface and may be skimmed off. It is either dried and powdered at once, or mixed while still wet with sugar of milk.

Pepsin may also be obtained by digesting the membranes in glycerin, in which the pepsin is soluble, and precipitating with alcohol.

Pepsin is absolutely indiffusible through parchment paper, and advantage may be taken of this to purify it by dialysis.

#### THE RENNET FERMENT.

The fourth stomach of the calf has been long known for its milk curdling properties, due to a ferment termed chymosin. This ferment is invariably present in the healthy human stomach, and is present in many animals. The chymosin may be extracted from the calf's stomach with water, but a better way is to digest with weak acid for 24 hours and carefully neutralize. Aqueous solutions of salicylic acid extract the ferment well, and will keep. Alcohol precipitates the ferment in an impure form. Prolonged contact with alcohol, especially if strong, is said to destroy the ferment. Fixed caustic alkalies have a

powerful destructive action upon it, even in very small quantities, and carbonate of sodium, calcined magnesias, etc., act the same, though in a lesser degree. Heat readily destroys chymosin, especially if acid.

#### THE FERMENTS OF THE PANCREAS.

Pancreatic juice is a more or less viscid liquid, invariably alkaline and readily putrefying. Alcohol causes an abundant precipitate, which carries down the ferments it contains. These are at least three:

- (1) A proteolytic ferment acting in neutral or alkaline solutions.
- (2) A diastasic ferment, similar to that in the saliva.
- (3) A fat-decomposing ferment which emulsifies and decomposes fats into glycerin and fat acids.

#### The proteolytic ferment

##### TRYPSIN

does not exist in the perfectly fresh pancreas, but is formed in an hour or two's time. It may be extracted by digesting with water, precipitating with alcohol, redissolving, reprecipitating, and digesting in absolute alcohol. The precipitate is treated with water, acetic acid added, filtered, sodium hydrate added to alight alkalinity, filtered, concentrated at 40 degrees C, filtered, and precipitated with alcohol. If necessary, it is purified by dialysis.

Trypsin acts most readily in a solution containing about 1 per cent. of  $\text{Na}_2\text{CO}_3$ , that being the strength of the juice. It acts in neutral and in very slightly acid solutions, but contact with warm acid fluids gradually decomposes it.

#### THE DIASTASIC FERMENT

is obtained by treating the pancreas by extracting with glycerin, chloroform water, solution of borax with boracic acid, brine, etc. By these methods solutions of the two ferments are obtained, which may be precipitated by alcohol. The ferment acts most readily on starch at from 80 to 45 degrees C. One part of the diastase is said to be able to convert 40,000 parts of starch into sugar and dextrin.

#### THE FAT DECOMPOSING FERMENT

cannot be extracted or kept so readily as the others. If two parts of juice be agitated with one of olive oil, or of some fat melting below 40 degrees C., a perfect and persistent emulsion is formed immediately. The fat globules are said to be finer than those in milk. Both the pancreas and its juice possess the power of decomposing fats. If a particle of the pancreas be dehydrated by means of alcohol, well teased out in an ethereal solution of butter fat, and afterward transferred to a drop of tincture of litmus, a cover glass being placed above it, the litmus is seen to be reddened all around the particle, due to the action of the fat acids separated from the butter.

Eight samples of pepsin were tested by the B. P. test and the results were shown. Six answered the test, two left much albumin undissolved. Five samples tested by the U. S. P. method were shown, of which three were satisfactory.

#### LOTION FOR DERMATITIS.

[*Journal of Cutaneous and Genito-Urinary Diseases*].

Sulph. præcip. .... 3 iss  
Gum tragacanth. .... gr. v  
Powdered camphor. .... gr. x  
Lime water. .... 3 j

#### Kola and Kolanin.\*

BY FRED. B. KILMER.

New Brunswick, N. J.

Those who can realize the thoughts of the coal-carrier who went to Newcastle, or him of Shakespeare who gilded gold dollars, colored flowers of the fields, sandpapered ice, and threw the reflection of a candle against the noon-day sun, can imagine the feelings with which I have accepted the call of your committee to read a paper before this body of pharmaceutical savants. In this noble institution of American pharmacy the lower classmen can attain a knowledge never reached even in the professor's chair in the school of many of us. For one denied these great privileges to attempt the discussion of a phyto-chemical subject before the faculty of this college seems highly presumptuous. To be given a topic that has been so ably handled in your journals, in the professors' chairs, and in these meetings, smacks of ridiculous excess. I shall, therefore, at the outset state that I have come to seek rather than to give information; to ask questions rather than to attempt to answer them, conceding to my auditors an ability and familiarity with the subject far greater in most respects than my own. We may note here, in retaliation against the ill-timed jests as to the slowness of Philadelphia, that the first scientific reference in this country to the kola plant, upon which I am to speak, may be found in the *American Journal of Pharmacy*, in 1885; that the first medical report in America upon its action was published in the *Philadelphia Medical Times*, in 1886. The first full clinical report was from the pen of Dr. Shoemaker of Philadelphia.

The subject assigned me is the well-worn theme, the kola plant. Its history and pharmacognosy are so familiar that we can safely pass them, except to call attention to the botanical specimen of a flowering branch, specimens of the pods, the nuts, photographs taken in the habitat of the drug, together with samples of the dried and undried fruit, all of which I present to your museum. The kola nuts, as found in our market, come mainly from Africa. The bulk of the West India nuts are consumed by the inhabitants of the islands; a very small part of the crop is shipped to Europe, commanding there a higher price than the African nuts. Lately, small supplies have reached our market from this source. No accurate estimate of the extent of the world's supply, nor the possible yield for this drug, can be given. The official reports of the African trade give from 2,500,000 to 3,000,000 pounds per year, which is mainly utilized for home consumption. Those who are familiar with tropical products can realize the difficulties and peculiarities of the market in such a commodity. It is carried on mainly through native women. There is a certain amount gathered for home demand. The quantity that will reach the shipping ports must depend upon the caprice of the natives, and especially as to how much they stand in need of rum or tobacco.

The crop must all be carried, often hundreds of miles, in head loads, through miasmatic forests, over almost impassable streams, across pathless mountains, under a tropical sun. The conditions

\* Read at a pharmaceutical meeting of the Philadelphia College of Pharmacy.

are such that to gather a ton of nuts and safely land them on a ship that plies along Africa's sunny shores is a task that one would shrink from after a survey of the field. The native gatherers are shrewd dealers, even if not well skilled in the arts of civilized commerce. They know how to corner supplies, to create a rise in price, and they also know that, when a European buyer wants the nuts badly, grades that have no value at home will find a ready market. This accounts in part for the quite variable nature of market specimens.

In the West Indies the governments encourage the cultivation of the plant, and before many years ample supplies from this source will be obtainable. In our own country some attention and discussion has taken place looking toward its cultivation on our soil. Therefore the following notes, gathered from observation and from the notes taken in the botanical departments of the West India Islands, may be of interest:

#### NOTES ON THE CULTIVATION OF KOLA.

The kola plant seems to grow well in any climate where there is plenty of rainfall and a warm, tropical sun. Of course the hotter and more moist the climate the better. Wherever bananas, nutmegs or cacao will grow it is safe to say that this tree will thrive. The best kind of soil is that which is deep, rich and clayey, although it will grow in a great variety of soils. In some of the West India Islands it may be found as high as 5,000 feet above the sea level, but the best specimens are generally found at not over 1,000 feet elevation. If the situation is low and damp the ground must be well drained. The young plants may be obtained directly from the seed, planted in the field where they are to grow; but the best results seem to come from planting the seeds in nursery beds, transplanting them when the plants are from 2 to 3 feet in height.

The seeds as usually obtained from growers are packed for shipment in boxes covered with earth, and the whole wet with fresh water. Holes are bored in the boxes for ventilation. The nursery beds in which they are planted are made of loam, peat or leaf mold and kept shaded. In nursery planting the seeds are put in the bamboo pots commonly used in the tropics and placed from 9 to 12 inches apart. It takes three to five weeks before the sprouts appear above ground. When ready for transplanting they are set a distance of about 25 feet apart. If the soil into which they are transplanted is not rich the best planters dig holes several feet deep, 5 feet each way around, and fill in with the topsoil.

It is necessary for the young plant to have shade. Many intelligent planters, who have lately taken up the planting of kola, use the banana for the purpose. The banana is a very rapid growing tree. It shelters the young kola plant and makes a profitable crop while the kola is coming into bearing; kola, in turn, will begin to yield by the time the banana has exhausted the soil. The bananas are planted 10, 11 or 12 feet apart, with the kola at every second banana in the direction of the line. Thus, a plot of 20 feet square is inclosed with banana trees with four kola plants at the corners, leaving the kola from 20 to 24 feet apart. In sheltered situations, as in a low valley between hills that have a growth of woods, the banana is omitted in the center of the square, to give more light and air. The gradual thinning out of the

banana is made as the kola acquires increased growth.

Kola is usually planted at the beginning of the wet season. Grown wild, it commences to yield fruit about the fifth or sixth year. Well cultivated specimens often begin to bear considerably earlier. In the wild state they reach full bearing in the ninth or tenth year. When the kola tree attains full size it is customary with planters to place in the field with them small varieties of coffee or some vegetable plants such as peas or yam. Kola gives the necessary shade. The stems and leaves of the other plants furnish a good fertilizer. By this method a kola plantation costs nothing except for the first planting. Kola does not appear to exhaust the soil as does the coffee, banana, orange, etc. Upon once attaining its growth it appears to be of permanent value. Specimens that have borne for 50 years and probably longer have been noted. Independent of its value for the nuts, kola is an excellent shade and timber tree, and is utilized for this purpose. A conservative estimate of the yield is 120 pounds of dried nuts, or over 250 pounds of green nuts per tree, or from 8,000 to 10,000 pounds per acre. No such amounts, however, are gathered in any portion of the West India Islands, owing to the unsystematic and haphazard measures employed in harvesting the crop.

#### THE PODS AND SEEDS.

Taking up that part of the plant probably of the greatest interest, the seeds or nuts, we may examine the pods, which we will find contain from two to 12 nuts or seeds, so closely pressed together in growing as to be crowded into various shapes. The cellular tissue of the pod before drying is filled with a very slimy, stringy mucilage that is largely absorbed upon ripening. A singular fact noticed about the seeds is the fact that red and white nuts are found side by side in the same pod. So far as my observation goes, pods may be found that contain all red or all white, but no trees give all white or all red seeds.

The native users lay great stress upon the difference between the white and red kola nuts. Symbolically, the white nuts mean peace, happiness, veneration, acquiescence to overtures. The red nuts mean the reverse: war, ill-will, challenge, rejection of overtures, etc. In some instances the white seeds command the higher price, being in repute as giving greater and better effects.

In the dried nuts found in our market it is difficult to distinguish between the white and red variety. Oxidation during the drying of the seeds gives to both about the same yellow-brown color. When subjected to the action of solvents, white or red nuts (dried) yield to water, alcohol, acetone or glacial acetic acid shades of orange and yellow, which are slightly deeper with the red than with the white variety, but so nearly alike that considerable practice is necessary to distinguish between them. The coloring matter of the red nuts is, however, very soluble in dilute mineral acids. The white and red varieties may be distinguished by macerating for 24 hours in dilute sulphuric or hydrochloric acid, when it will be found that the acid extraction of the red kola is a beautiful red rose, while that of the white seeds is of a light straw color.

Heckel has shown that if the acid extraction is made alkaline with ammonia, that from red nuts assumes a purplish violet, that from white an ochre-like

color. Several observers have noted that the red nuts give a larger percentage of moisture (Heckel gives 46 per cent. for white, 56 per cent. for red). The same author claims that the white seeds contain 5 per cent. more caffeine, 7 per cent. more of the peculiar principle, kolanin, than the red. My own experiments tend to confirm the observation that there is an appreciable difference in the amount of glucoside found in the white seed as against that found in the red.

#### ALKALOIDS.

The alkaloids so far identified as belonging to this plant are such familiar substances that any comment upon them is unnecessary. Worthy of note, however, is the fact of their close relationship to each other in chemical formula and structure. Also, that they are analogous and apparently identical with the alkaloids found in all the caffeic group of plants; that they are closely related chemically and physiologically with the xanthine bodies, which are found normally in the muscular and other tissues, such as the liver, spleen, brain substances, etc., of the animal body. These xanthine bodies are typical products of the downward destructive metabolism of proteids. Similarly, the alkaloids of this plant seem to form when the seed is on its way toward removal from the tree.

Xanthine  $C_4H_4N_4O_2$ .

Para-xanthine  $C_4H_4N_4O_2$ .

(Dimethyl-xanthine.)

Theobromine  $C_4H_4N_4O_2$ .

(Dimethyl-xanthine.)

Caffeine  $C_8H_{10}N_4O_2$ .

(Trimethyl-xanthine.)

Caffeine, as theine, was roughly identified as present in these nuts by Dr. Daniells, and confirmed by Attfield, in 1865, who gave the percentage in the samples examined as 2.18. The second alkaloid, theobromine, present in quite small quantities, was separated later. Numerous assays of the drug show greatly varying amounts of these alkaloids. A quite recent assay of the carefully prepared powder is as follows:]

ASSAY OF SAMPLE OF DRIED KOLA BY  
WENTWORTH LASCELLES SCOTT, CHEMICAL AND MICROSCOPICAL ANALYST, LONDON.

*Calculated Upon the Substance Free from Hygroscopic Moisture.*

Caffeine (or theine).....	3.202
Theobromine.....	.214
Other alkaloids.....	.085
Kola red and kola orange.....	3.574
Fatty matter.....	1.142
Ash.....	3.955

The experiments made by the writer in the habitat of the plant seem to show that these alkaloids are found chiefly in the ripe or nearly ripe seeds (except that in a very few instances the pods have given faint alkaloidal reaction). The wood, bark and leaves give entirely negative results. Experiments are now being made to determine more accurately at just what stage in the life history of the plant these bodies are first manifest. In the limited number of experiments made the results indicate that in the green nuts only traces of the free alkaloids are present and that the quantity increases materially as the nuts ripen.

#### KOLANIN.

Heckel and Schlagdenhauffen have set us an illustrious example in the study of drugs by devoting 12 years to the investigation of this plant. Very early in their researches, after exhausting the

alkaloids, they separated a body which seemed to them to present an analogy to cinchona red. They found it to contain an active principle which they were at first unable to separate, but which they found to be capable of giving striking physiological results.

Ernst Knebel of Steeg (in 1891), also a notable name in the history of this drug, in a long and laborious examination demonstrated that a glucosidal body was present, to which he gave the name kolanin. In his essay he gives several methods of separation, one of which is as follows: The powdered kola is first extracted with alcohol, the extract evaporated to dryness, the finely ground extract then exhausted with chloroform. When the residue is found freed from caffeine it is mixed with clean sand, washed in cold water until the washings run off slightly colored. (This washing is to remove glucose, tannin and salts.) The washed residue is dissolved in alcohol, filtered, and again evaporated. The product is substantially the *kola rouge* of Heckel. Knebel demonstrated that this glucoside upon decomposition gave caffeine, glucose and a third non-nitrogenous body (Knebel's *kola roth*). We should, therefore, remember that Knebel's kola red is a non-nitrogenous body, which, he stated, is joined in chemical union with caffeine as a component part of the glucoside kolanin.

Real *kola roth*, as Knebel terms it, is a decomposition product of the glucoside. He shows that it is closely related to the tannins, containing the same number of hydroxyl groups, and giving upon fusion with caustic potash, pyrocatechin, formic, acetic and isobutyric acids. He believes this substance is converted into tannic acid during the drying of the nuts. The work of both Heckel and Knebel, heretofore referred to, upon kolanin was conducted mainly upon the dried drug. It is quite evident, however, from the results obtained by a number of other observers that in the undried seed, especially before ripening, little or no caffeine exists as a free alkaloid. In carefully manipulated samples of the unripe nut the quantity in some instances has been found to be quite small, especially when the nuts are fresh from the tree. It has, so far, been found difficult to separate kolanin free from fat, resinous and extractive matter; the tannin and mineral constituents present in small amounts are also more or less difficult of removal. The glucosidal body itself is also given to decomposition in the manipulations used for removal. Therefore it may not be strictly correct to say the end product is absolute kolanin.\*

In the process given by Knebel for the separation of kolanin even the washing with water causes some change in the glucoside. The *kola rouge* of Heckel and Schlagdenhaufen is really an impure glucoside, contaminated with glucose, tannin, inorganic salts and some fatty bodies.

For their product these authors have given the following properties and reactions: Freed from glucose and fixed salts by precipitation with acetate of lead and sulphuretted hydrogen it gives a deep

green color with iron salts. Ammoniated citrate of iron, with an excess of ammonia, gives a blood-red coloration. Tarsized antimony gives a voluminous precipitate; gelatin, a white precipitate. A solution of nitrate of silver is reduced. The product itself is a brown-red, amorphous, bitter powder, insoluble in cold water, partly soluble in boiling water, in hot water forming a resinous, greasy ball, cooling to a shiny, hard mass. When freed from tannin its solution gives a brown precipitate with alum; with sulphate of copper a dark green precipitate. A precipitate is formed with a solution of iodine in potassium iodide. A more purified form of kolanin is soluble in boiling water, alcoholic solution of potassium hydrate and ammonia. Its alkaline solution is red-brown when cold, but becomes red on warming. Its alcohol solutions do not act upon salts of iron, but are precipitated by plumbic acetate. Upon sublimation this product gives out an empyreumatic oil and traces of caffeine. Upon boiling with dilute hydrochloric acid it is not dissolved, but partly decomposed into glucose and caffeine. As above noted, it is partly broken up by continued boiling in water, and completely by boiling in a dilute sulphuric acid, 20 per cent. strength.

Knebel, in his article, demonstrates that the glucoside, kept at a temperature of 60 to 70 degrees C. for 24 hours, is decomposed into its components, viz., caffeine, glucose and a third product, non-nitrogenous coloring matter, which he names *kola roth*. In his work he demonstrates the molecular proportions of these constituents. Kolanin is also decomposed by the action of the ferment of the kola, kolazym by the action of the ferments of the saliva and of the gastric juice.

The crude method pursued by the writer in the habitat when working upon the undried nuts was to extract the finely chopped nuts with ether, allow the ether to partly evaporate, then extract both the nut and ethereal residue with chloroform. In the chloroform extraction the caffeine was to be found in the ethereal solution of the glucoside. This process was first devised as a field expedient, where the laboratory was carried on a mule's back. Its use was afterward verified in the home laboratory. In practice it was found that ether extracted the water and the glucoside and some caffeine, but left behind some alkaloid; hence, the further extraction with chloroform was necessary. It was also found that, if the nuts were chopped under ether, alcohol or other liquid, without allowing exposure to air and drying, only a faint reaction for alkaloid would result; whereas, if the nuts were broken open and allowed to dry or partly dry, quite a crop of crystals could be separated.

In subsequent experiments it was found that all manipulations which involved the use of heat—such as allowing the nuts to partly or fully dry—cutting them open resulted in quite an increase of alkaloid crystals; also that, when great care was used, with little exposure to air, the avoidance of heat in all stages of the process, the amount of alkaloid was apparently much less. This was afterward confirmed when, in attempting to separate the glucoside, it was found that processes involving heat and exposure to air provoked the breaking up of the glucoside.

From the processes outlined by both

Heckel and Knebel we can readily see that several methods of operation will give the body termed kolanin. For instance, if a solid extract (or an evaporated fluid) be exhausted of caffeine by the aid of chloroform, then washed with cold water to remove such extractive matters as may be soluble, there will remain the kolanin in an impure state. If, in his process, after the exhaustion of the extract with chloroform, the residue is extracted with ether, the kolanin, in a somewhat pure state, will be taken up in the ether and may be separated by evaporation. After the chloroform is exhausted I have found it good practice to wash first with petroleum ether to remove some fatty bodies not removed by chloroform, then to follow with the ether extraction. If in all these operations the solvents and washing liquids are kept faintly acid, there is, seemingly, less decomposition of the glucoside and formation of the tannic-like matters.

#### FERMENTS.

It has been proven that there is present in this nut an unorganized ferment, to which the name kolazym has been applied. This body appears to possess manifold powers (possibly there is more than one ferment present). Kolazym is a glucosidal enzyme, having the power to split up the glucoside kolanin into glucose, caffeine, and a tannin-like body. It is also a carbohydrate enzyme, giving quite active diastasic action upon starch. It seems to be active in faintly acid solutions, but will act in neutral and feebly alkaline media, acting best at a temperature of about 54 to 65 degrees C. Extreme cold, as well as boiling, seems to destroy its powers. It may be quite readily separated from the undried nuts by macerating the chopped tissue in glycerin and water, made faintly acid, then pouring the glycerin extraction upon dilute alcohol. A fine, cloudy precipitate of proteid matter will be thrown out of the solution, carrying with it the ferment. The precipitate may be further purified by redissolving in water and glycerin, and reprecipitation as before, with final washing in absolute alcohol. Its most active state seems to be in this freshly precipitated and moist condition. Drying over calcium chloride or sulphuric acid seems to inhibit it. Drying by heat almost wholly destroys its power. The separated ferment will convert soluble starch into dextrine bodies and sugar. It will decompose kolanin into its constituents, glucose, caffeine and kola red. The exact nature and office of plant ferments are somewhat obscure. Prof. J. R. Greene, London, gives as an explanation the fact that in constructive processes of plant life an excess of material is formed over and above that immediately utilized; that this excess is temporarily deposited in the tissues, nutritive material of various kinds being found in different regions of the plant. When the constructive process is at rest the action of the ferment is called forth, and the reserve food is made ready for assimilation by a process of digestion, in which the ferments are active factors. Under this view, kolazym may be said to act upon the reserve food stored in the seed. During the resting stage of the seed it starts the digestion of food for the future plant.

In the kola nut some of the products of this metabolism are the alkaloids caffeine and theobromine; similarly, a product of the metabolism of meat are the closely related xanthine bodies. We

\* I am also of the opinion that in the processes in common use for the assay of kola, kolanin is not entirely broken up, and therefore the whole of the alkaloidal content of the drug is not revealed in the result. Prof. A. R. L. Dohme is of the opinion, however, that, in the process outlined by him at one of these meetings the glucoside is entirely decomposed. I have suggested to him that he continue his investigations, and have sent him samples of both the dried and undried drug for the purpose.

find in the ripened seed glucose, which shows the ferment has been at work. It has been stated that in the germinating stage more caffeine is present than when the seeds were first taken from the tree. Professor Greene claims that the glucoside bodies and their ferments which act upon them are deposited in different cells.

#### PHARMACOLOGICAL NOTES.

An apology may be due from the pharmacist when he enters the domain of pharmacology, but in my judgment the work of the pharmacist does not end with his chemical assay. To verify or nullify his conclusions the action of any drug in question upon animal economy must be determined (quite apart and distinct from their action in disease). Under our present methods of drug investigation this work is left largely in the hands of the medical practitioners, but, of necessity, does not belong there. Not all practitioners of medicine are fully competent to reach proper conclusions in this field, and those who are competent are too busy to carry out any extended researches. If all that were known about the host of new and old drugs was expressed in a table of their chemical constituents, what information would this knowledge convey as to their value in medicine? If kola were an entirely new drug; if its alkaloids, caffeine and theobromine, its glucoside kolanin, were entirely known, should the pharmacist be content to rest on its assay and say to the physician, I find in this drug one glucosidal body and two free alkaloids; the alkaloids are so similar, chemically, that it is difficult to tell them apart, but here's the value of this drug expressed in chemical symbols? Is this all that pharmacy can do for medicine?

Before a drug can be given a place in therapeutics somebody must first accurately determine its physiological action. The proper value of a drug in medicine will largely depend upon the exhibition of its constituents in their most active condition. The pharmacist must know the physiological action as well as the chemical nature, else how can he make an eligible preparation? The study of any drug is pharmaceutically incomplete until this is done, and without such a study medicine cannot apply it in therapeutics. It seems to me, therefore, that pharmacology lies well within the domain of pharmaceutical chemistry. Modern science teaches us that drugs having differing chemical affinities differ in their effects upon the body, while those belonging to the same chemical groups are allied in their action. By altering their chemical composition the place of their action and effect is changed. The chemical constitution of a substance has an important bearing upon the part of the organism which it will affect, so that, in the evolution of science and the application of drugs, medicine must invade pharmaceutical chemistry, or else pharmacy must absorb pharmacology.

We may rightly abhor and eschew counter prescribing and pharmaceutical therapeutics, but it seems reasonable that the study of the action of drugs, apart from their therapy, is a fitting field for the pharmacist. With these thoughts, let us briefly review the pharmacology of the drug before us. By chemical assay we have separated two alkaloids, caffeine and theobromine. As found in the plant, they are so closely combined as to be difficult of separation. Physiologically, their action seems to

materially differ from a simple mixture of the same two alkaloids in equivalent proportions.

From a chemical point of view we have expressed the value of this drug on its alkaloidal contents, irrespective of all other constituents. Is this the correct and the total value? Is morphine the full measure of the value of opium, cocaine of coca, quinine of cinchona, atropine of belladonna? Is the measure of a drug summed up even by its total alkaloidal contents? Pharmacology would answer no. The alkaloids separate from the drug, while presenting actions that resemble those of the drug itself, by no means replace or fully represent it. A statement by Prof. John U. Lloyd in respect to belladonna may stand for all drugs containing alkaloids:

"Neither a solution of atropine nor of the salts of atropine or hyoscamine in proportion to correspond to those obtained from the alcoholic extract or tincture of belladonna, seems to possess the full qualities of the alcoholic extract or a percolate of good belladonna. Hence, admixtures of extractive with the purified alkaloids cannot fully replace natural belladonna extractives that are of the same alkaloidal proportions.

"For this reason phyto-chemical analysis does not altogether determine the comparative therapeutic value or physiological energies of belladonna preparations, or that such as are deficient in alkaloid are correspondingly inferior."

In the drug under consideration an assay\* from various authorities shows, besides the alkaloids named, 16 other substances set apart and named. Some of these groups include a still larger number of separate constituents. Are these constituents no factor in the influence of the drug upon the organism? The physiological action of the drug, as reported by a host of observers, is far different from that of caffeine or any drug of the caffeine group. One record of observations, showing its influence upon muscular contractions, shows that caffeine acts upon the height of the contraction. The action of caffeine increases these, but the effect is of short duration, the amplitude being very restricted. The muscle is exhausted as rapidly, even more so than in the normal state. The drug kola acts upon the number and intensity of the contractions. The duration of the contractions is greater, the amplitude is larger and longer sustained. The decrease which follows is in a very regular progression. (DuBoise.)

Dr. H. Marie has shown, by a series of comparative tracings, that with caffeine the starting contractions are very elevating, but there is a sudden fall reaching below the starting point; while with kola there is a gradual elevation, which is continued until the drug begins to lose its influence, when the descent is very

regular and gradual to the normal point. It is characteristic of caffeine and of other stimulating drugs that there is a depressing action, but there is none with kola. This has been verified by Drs. Smith and Leuf, who, in connection with Dr. Woodbury, recently made some interesting studies of this drug.

A series of sphygmograph tracings made by them show an undoubted increase of the pulse and heart action, with no reaction thereafter. Thus we can see that the free alkaloids by no means account for the full value of the drug. The action of the other constituents, save one or two, has been barely touched upon. The essential oil has been defined as a tonic of the generative organs.

Whatever action or influences lie in the substances grouped under the head of resinous matter and fatty bodies, etc., at present are unknown. In the light of pharmacology one constituent, however, seems to be far superior in power and action to that of the other alkaloids, and gives the drug its place and rank. It is the substance termed kolanin. Observers have reported that this substance separated from the drug (containing, of course, no free alkaloids) "in very small amounts, increases the intensity and duration of the muscular contractions." The amplitude of the contractions is preserved longer than with the drug itself. The conservation of the muscular energy is in marked contrast with that of the alkaloids separated from the drug, exercising a well-defined action peculiar to itself.

Dr. Edouard Heckel strongly reiterates and produces a vast amount of testimony as to the marked difference and superiority between the action of kolanin and that of the free alkaloids from the drug, and of the other substances of this class. Several other observations made recently in this country show a very marked action of this drug after exhaustion of all the free alkaloids. But, so far, all our studies upon this plant and those of its class have given but a feeble light upon their whole nature. There are still formidable difficulties to surmount before we can say we have reached the ultimate truth.

From a chemical point of view the three presumable ultimates separated seem to carry in part the energy of the original plant. Of these three, two are alkaloids, of which we can sum up our knowledge by saying they are very closely related, yet they are very different. We do not know as to their origin, are not agreed as to when they begin to form, cannot tell how far the life and death processes within the plant or how greatly the chemical reactions in our test tubes have had to do with their formation, their increase or decrease in amount. When we have separated these two alkaloid bodies and given a chemical measure to the drug there remains in our apparently worthless residue one substance at least, which has been named kolanin, to which pharmacology assigns a higher value than to all the rest. Chemistry can only by hard work partly pull it to pieces. It has not yet fully decided as to its final products.\*

Then we have the ferment body kolanin. Authorities sum up our present

\* In manipulating the tannin-like compound of Knebel it is extremely difficult to readily effect a complete separation of the alkaloids. They are either very adherent or form slowly during the breaking down of the original substances, so that, at times, even after hours, extending into days of extraction, faint reactions of caffeine are observed.

* Caffeine.....	2.348
Theobromine.....	0.022
Kolanin.....	1.230
Fat.....	0.784
Essential oil.....	0.051
Resin.....	1.012
Tannin.....	1.561
Glucose.....	2.875
Saccharose.....	0.612
Mucilage.....	8.040
Starch.....	80.580
Dextrine.....	2.130
Soluble salts.....	0.070
Ash.....	8.325
Albuminoids.....	6.825
Coloring.....	2.561
Moisture.....	10.117
Cellulose, etc.....	80.876
	100.000



knowledge of this class of substances by saying: "Chemically, we know nothing of them, except that an apparently small and immeasurable quantity may affect the constitution of a large quantity of certain other chemical compounds. Their action seems to be the breaking up of large molecules with which they come in contact with smaller molecules." The most that we can say of kolazym is that it is present in the plant and can define its apparent powers.

Among the many problems that arise may we not rightly ask that if by any means we could gain full control of this plant in its manifold stages of life, could we so direct its course that it might go on at our command producing the peculiar glucosidal body kolanin, could we so govern the action of this ferment as to compel the continuous production of glucose, caffeine and other products? Are conditions possible whereby the yield of glucosides and consequent alkaloids could be increased? Could we here secure a perpetual fountain of chemical products? At present we dare not even attempt a penetration into the depth of the dead or the vitalized plant as to the compounds we have grouped in our essay as "matters." We may, therefore, turn from our chemical research to the pharmacist's ever-ready crucible, his trained and trusted senses. Take an undried seed of our sterculia plant, prick through its skin coating or break it open. Mark the result. In a space of time that is not measurable, the color of the flesh within the tissue assumes an orange brown color rapidly extending over the whole abrasion. It goes on until the whole structure assumes this hue. What are those wondrous transformations that take place before our eyes? Is it not reasonable to assume that if our assay had been made before the tissue had been broken, it would have given different results than if made a few seconds afterward? In this little act have we not in some way loosened the dormant chemic life stored within and made its operations visible?

Who can measure the infinitesimal energies evolved? By the prick of a pin we have started a chemical factory in motion, have involved reactions, equations so great that the scientific mind cannot calculate them.

Bite off a piece of the nut and chew it. At first the taste is bitter and acid; under the grinding and mastication this changes to a sweet. The tongue and palate reason out glucose without the aid of Fehling's solution. Swallow the juice or the masticated substance, put your finger upon the pulse or heart, measure the beats and their force. They are stronger and more regular.

Measure the contractions of muscular energy, try their vigor and test their power of endurance. The intensity and force is amplified. The brain, nerve and muscle have received an impetus and derived power from the energy stored within a little nutshell. Is it because the plant contains the essence of energy or the alkaloid of power?

Can we not more truly say that there is a definite chemical affinity between the several molecules of its constituent compounds and the molecules of the nerve organism, with stimulation and vigor as links in the chain? The native users of this plant endowed it with miraculous powers. An Arabian physician, a few centuries ago, named it the "tree of heaven."

To-day, the medical and lay journals of Europe and America tell a story of a

"wonderful tropical nut," "a marvelous drug from Africa." This somewhat crudely indicates our exact knowledge concerning it. A distinguished American botanist recently described this plant as, to him, the most fascinating and mysterious specimen of Nature's handiwork. A professor in one of our pharmacy colleges says that he dimly sees within and through its mysterious processes the key to all our alkaloid-bearing plants. When the door shall be wide opened and all is made plain the influence and value of the discovery to science and medicine, he believes, will be so great that it may be counted with the "proin" of Berzelius, the "dawn of the day."

### The Alkaloids of *Anagyris Foetida*.

A very valuable paper on these alkaloids appears in the current number of the *Apotheker Zeitung*, by the well-known chemist, Dr. Partheil, in conjunction with L. Spasski. The author points out that under the name "*Anagrynum hydrobromicum*," a preparation is on the markets, which is extracted from the seeds of *Anagyris foetida*. Several references to this poison can be found in chemical literature. Cornevin states that the seeds owe their toxicity to a body identical with the active principle of laburnum, cytisine. The same statement is found in the *Reale-encyclopedia of Pharmacy*. Reale claimed to have extracted from the seeds by a very tedious method, an alkaloid of the composition  $C_{11}H_{15}NO_2$ . Two years ago Hardy and Gallois offered a notice on anagryrine. They extracted the coarsely powdered seeds with cold water, precipitated the extract with acetate of lead, removed excess of lead by means of  $H_2S$ , and precipitated the concentrated filtrate with  $CgCl_2$ . The mercury precipitate was then decomposed with  $H_2S$  and the filtrate evaporated to a small bulb, rendered alkaline with  $K_2CO_3$ , and extracted with chloroform. The base itself formed a yellow amorphous mass, which yielded a crystalline hydrochloride.

From the analyses of the hydrochloride, gold salt, and platinum salt, the formula  $C_{11}H_{15}N_2O_2$  was deduced. A physiological investigation of the base was undertaken by Bochefontaine and Gley. Partheil and Spasski have now investigated the commercial anagryrine hydrobromide, and have come to the conclusion that the body is not a pure substance. They state that it contains one alkaloid identical with cytisine, and a second for which the name anagryrine is retained. Whether any other alkaloids exist in the seeds or not remains to be proved. To extract the alkaloids from the seeds they extract the coarsely powdered seeds in a percolator with alcohol (60 per cent.) acidulated with acetic acid. From the resulting extract the alcohol was distilled and the residue diluted with water, and the separated resinous and fatty matter filtered off. The filtrate was precipitated with lead acetate, rendered alkaline and extracted with chloroform. After recovering the chloroform the crude alkaloids remained as a brownish oil, without tendency to crystallize.

For the separation of the bases, the hydrochloric solution was treated with mercuric chloride, and the resulting double salt filtered off and washed with solution of  $HgCl_2$ . The precipitate was decomposed with  $H_2S$ , and excess of the gas driven off. This liquid served for the preparation of anagryrine. The fil-

trate from the anagryrine mercuric salt was freed from mercury by means of  $H_2S$ , and the solution rendered alkaline with  $KOH$ , and extracted with chloroform. This solvent deposited the cytisine in fine crystals. The base was identical with cytisine from other sources, yielding the characteristic reaction with ferric chloride and  $H_2O_2$ . The melting point was 152 to 158 degrees. The aqueous solution was levorotatory  $[\alpha]_D = -120.5$  degrees. The gold salt prepared from the base agrees in its general properties and its melting point 212 to 218 degrees with cytisine gold chlorides. Analyses yielded the following results:

Found (gold).  
1) 37.07 per cent., 37.19 per cent.  
calculated for  $C_{11}H_{15}N_2O_2 \cdot H_2AuCl$   
37.11 per cent.

Examination of the platinum salt also confirmed the identity. The very characteristic cytisine-tartrate was also prepared. For the preparation of anagryrine, the platinum double salt was prepared from the solution above referred to. The anagryrine platinum chloride is only very slightly soluble in cold water. It separates in orange-red tablets. Analyses gave the following results:  $H_2O = 4.05$  per cent.;  $Pt = 29.41$  and  $29.47$  per cent. The following results were also obtained in nine analyses:

	1	2	3	4	5
C.....	—	—	—	—	26.57
H.....	—	—	—	—	3.70
Pt.....	28.44	28.26	28.46	28.56	—
N.....	—	—	—	—	—
Cl.....	—	—	—	—	—

	6	7	8	9	Hardy and Gallois.
C.....	26.38	—	—	—	26.48
H.....	3.87	—	—	—	3.95
Pt.....	—	28.47	—	—	29.55
N.....	—	—	4.06	—	4.43
Cl.....	—	—	—	31.15	31.08

In anagryrine hydrochloride 11.85 per cent. of Cl was found, against 12.04 per cent. by Hardy and Gallois. The gold salt yielded the following results:

	Partheil and Spasski.	Hardy and Gallois.
Au.....	38.93, 38.80, 38.61	38.79
Cl.....	24.42	24.60

A portion of the platinum salt was decomposed with  $H_2S$ , and the filtrate rendered alkaline and extracted with chloroform. The free base did not appear to crystallize, but remained as a yellowish varnish. Reale's formula,  $C_{11}H_{15}NO_2$ , is obviously incorrect. All the experiments support Hardy and Gallois formula,  $C_{11}H_{15}N_2O_2$ , more closely, but a doubt exists as to its correctness. The authors refrain, however, from putting forward any alternative formula at present. The conclusions, therefore, to which these researches bring the author are:

1. Cytisine is contained in anagryris seeds.
2. Anagryrine also occurs in the seeds.
3. Anagryrine yields the characteristic Moer's reaction, hitherto looked upon as peculiar to cytisine.

### To Prevent the Caking of Table Salt.

A recent patent claims that by adding to salt glycerin, or a mixture of glycerin and cotton seed oil, in the proportion of 10 ounces of glycerin to 135 pounds of salt, or 2 to 3 ounces of glycerin and 2 to 3 ounces of cotton seed oil, the caking of the table salt is entirely prevented.



## The New Photography.

Professor Roentgen's discovery of the applicability of the rays from a Crookes tube to the production of photographs, which was mentioned editorially in our last issue, has aroused the most profound interest throughout the scientific world, and through the courtesy of the *Journal* of this city we are enabled to present herewith drawings of the first photo-

graph near a Crookes tube, opposite the cathode. I placed my hand between the cathode and the wooden box, so that the rays should pass through my hand before they reached the sensitive film in the wooden box. I exposed the plate to the rays for a minute and a half, and on development perceived an image of the hand with the principal lines of the bones, the knuckles and the phalanges. A clear and distinct representation of the bones was obtained down to the middle of the palm. Careful inspection of the negative showed considerable detail, although



PHOTOGRAPH OF THE HAND WITH ROENTGEN RAYS.

This shows the bones through the flesh of a human hand, and only hints at the possibilities of the marvelous process. It was made with imperfect apparatus, but is pronounced a success by scientists. Our engraving is from a photograph by Campbell Swinton of London, reproduced here through the courtesy of *The Iron Age*.

graphs ever taken by this process in America. It is, in one sense, an error to speak of them as photographs, as photo means light, and light, as heretofore understood, plays no part in their production. It also differs from an ordinary photograph in that no lens is used.

Prof. John Trowbridge of Harvard University thus describes the method by which he produced the photograph, a drawing of which we show herewith:

The next experiment that I tried was an endeavor to obtain a photograph of the bones of the human hand. I placed a sensitive plate in a wooden box, and, having brought the box

near a Crookes tube, opposite the cathode, I placed my hand between the cathode and the wooden box, so that the rays should pass through my hand before they reached the sensitive film in the wooden box. I exposed the plate to the rays for a minute and a half, and on development perceived an image of the hand with the principal lines of the bones, the knuckles and the phalanges. A clear and distinct representation of the bones was obtained down to the middle of the palm. Careful inspection of the negative showed considerable detail, although

### PROFESSOR TROWBRIDGE'S APPARATUS.

The apparatus which Professor Trowbridge employed was essentially a Tesla coil. The current from the street service ordinarily used for lighting the building was led into the laboratory, and was then transformed from 1,000 voltage to 60 volts. It was then, by means of what is called a step-up transformer, exalted to

perhaps 50,000 volts. This would produce a powerful spark, by means of Leyden jars, of perhaps an inch. This spark was formed between the poles of a horseshoe magnet, and was blown out by means of this magnet. The current which excited the spark was then transformed by means of a Tesla coil to still higher voltage, and a Crookes tube was placed between the terminals of the Tesla coil. Several types of Crookes tubes were employed.

The most satisfactory form consisted of a spherical bulb inclosing an aluminum plate which served for the cathode, and which sent forth the parallel bundle of cathode rays. The Crookes tubes in which the cathode is of the form of a concave aluminum mirror, bringing the cathode rays to a focus on the walls of the vessel, he did not find so satisfactory as the tube just described. In the former the cathode rays proceeded from a flat plate of aluminum in a parallel bundle of rays. "It was evident to my mind," said Professor Trowbridge, "that the Crookes tubes which we now employ to produce these effects are very inadequate; that they are not designed to stand the sufficiently powerful excitation in order to get the best effects from the cathode rays.

With the Tesla coil it was unsafe to excite the tubes longer than a minute on account of the great heat developed. If a tube could be constructed of largest size, with a large sheet of, say 14 inches square of aluminum for the cathode, and a window of aluminum to allow the bundle of parallel rays to pass out unimpeded, as they now are by the glass, much better results, I think could be obtained. All the forms of Crookes tubes now in general use have cathode terminals that are small, comparatively speaking. The rays emanate, therefore, from what may be considered almost a point, and throw diffused shadows, much like those cast by a candle, whereas, if they passed out from a large surface in a parallel bundle of rays, one might expect to have much more sharply defined images.

### PROFESSOR WRIGHT'S EXPERIMENTS.

We also present, through the courtesy of the *Journal*, a drawing of a plate made by Prof. A. W. Wright, Professor of Experimental Physics at Yale University.

Professor Wright's experiments were made with a great variety of substances, and it was found that strong impressions were obtained upon a photographic plate even when it was inclosed in an opaque wrapping of black paper and covered with a pine board  $\frac{1}{4}$  inch thick between the rays and the plate. He was successful in obtaining distinct impressions of a number of American coins—silver, copper and nickel—showing almost complete interception of the rays; but there were differences, the copper coins transmitting more than the nickel and the nickel more than the silver.

It may be said with regard to the pictures produced on the sensitive plates by these experiments that they have to the eye an appearance similar to those of shadows thrown by the object upon a surface when the source of light is but a short distance away. If the object is at a short interval from the illuminated surface the image is somewhat enlarged, also distorted if the rays fall obliquely, and the edges somewhat blurred or diffused. If the distance of the tube is increased or the interposed opaque layer is thinner so that the object experimented upon is brought quite near to the sensitive plate, then the outline of the pic-

ture is more sharp and clear and the proportions are more nearly normal. In Professor Wright's first successful experiment, instead of a photographic plate, a piece of sensitive bromide paper was used simply wrapped in stout black paper absolutely opaque, on which the objects were laid, consisting of a pair of scissors, a lead pencil, and a quarter of a dollar. These objects left a strong impression, with remarkably clear outlines of their exact forms.

#### PROFESSOR PUPIN'S MODIFICATION OF THE APPARATUS.

Professor Pupin of Columbia College has found it possible to replace the Crookes tube with a glass tube from which the air had been exhausted like the Crookes tube, but which was entirely without electrodes or metallic terminals inside the tube, whereas the types employed by Professor Roentgen and other experimenters have thus far been of the kind known as Crookes tubes and provided with metallic electrodes. The tube was less than 15 inches long and not more than 2 or 3 inches in diameter, and was placed in a horizontal position on a long case which served the purposes of a table. A shallow box or holder, containing the sensitive plate, was placed on edge at one side of and parallel with the tube, and at a distance of only 5 or 6 inches from it. The objects which were photographed were placed between the tube and the holder, standing, in fact, on end and leaning against the holder, the cover of which was of ebonite, or hard rubber.

#### THE ELECTRICAL APPLIANCES USED BY PROFESSOR PUPIN.

The electrical appliances used by Professor Pupin in connection with the vacuum tube also deserve a brief description. Off in one corner of the room was a dynamo which developed an alternating current. The voltage of this current was too high for the safety of one of the instruments through which it was made to pass, and hence it was reduced to 50 volts with a small "stepdown" transformer. The current next went into a Ruhmkorff coil, which is really a powerful "stepup" transformer and raised the voltage to 8,000, and finally was led to a big Leyden jar. This reservoir was charged and instantly discharged itself with every alternation of the current, which was at the rate of 850 a second. The discharge occurred through a supplementary circuit, and in taking place caused a rapid succession of sparks to leap across an air gap between two brass knobs.

#### THE DISRUPTIVE DISCHARGE.

This is called a "disruptive discharge," because the current has to burst through a non conducting material, but Mr. Tesla several years ago recommended its use in certain cases because of a new set of vibrations, of fabulous frequency, obtained thereby. Each time a spark breaks across the thin insulating barrier at the knobs, a rapid but short succession of waves is excited, fully a million, perhaps many millions a second. The branch circuit in which these oscillations were provoked by Dr. Pupin was made to include another "stepup" transformer, whereby the potential or pressure was raised to 50,000 or 60,000 volts. Thence by the wires the current was conducted to the vacuum tube.

The apparatus thus arranged was left for exposure for something like two

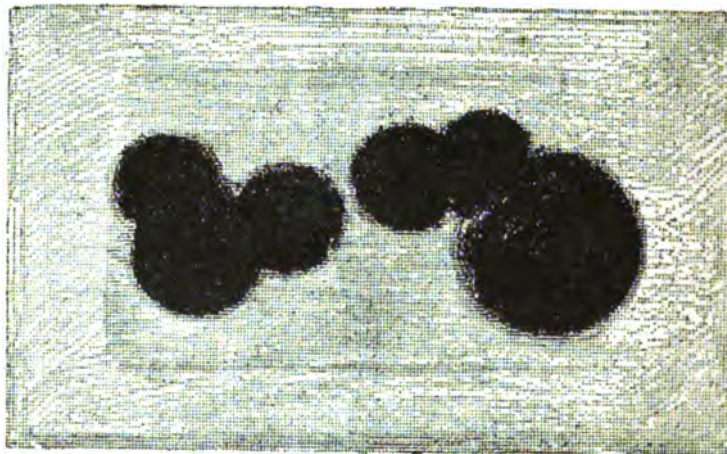
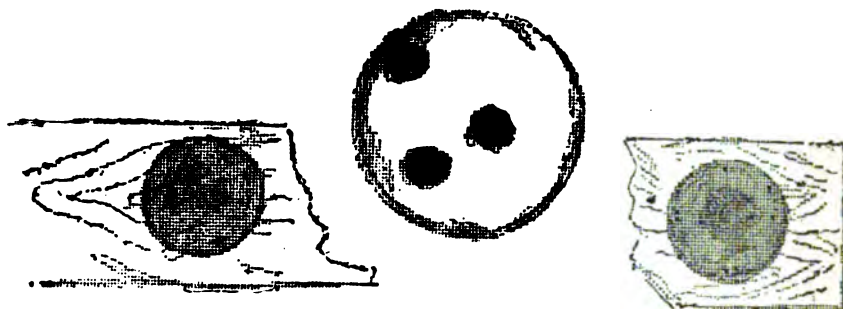
hours, and when the plate inclosed in the holder was developed it was found to bear a very distinct image of the two objects resting against the outside of the case. The key and corkscrew were made of a metal which has been found to be opaque to the X rays. They consequently caused a distinct shadow to appear on the plate.

#### Professor Roentgen.

Professor Roentgen is of Dutch birth, and his full name is Wilhelm Conrad Roentgen. He studied in Zurich, where

He has been at Wuerzburg University since 1888. He has written various works, such as a method to fix the isothermal surfaces of crystals, and on the use of the ice calorimeter to determine the intensity of sunlight. Then he turned to electricity, and studied the figures produced in dust by electrical discharges as Professor Kundt showed them and the curious phenomena shown by electricity passing through various gases. The absorption of ordinary heat rays by steam and gases generally occupied him also.

Many other studies in physics may be put to his account; a new aneroid bar-



#### PROFESSOR WRIGHT'S PHOTOGRAPHS.

These show coins taken through three thicknesses of leather in a sealakin pocket book, the lead in a pencil, three metal balls through a pasteboard box, and two dimes through an inch of wood. This print reproduces the effect of the print from the negative, the less permeable substances showing dark.

(Made by Professor A. W. Wright of Yale for and reproduced by permission of the New York Journal.)

he issued a monograph on the way to establish the relations as to the warmth that exists in atmospheric air. When Professor Kundt left Zurich for Wuerzburg his favorite disciple, Roentgen, followed, and later again to Strasburg University, where Kundt and Roentgen held the same positions as professor and assistant. In 1878 he taught at Strasburg; in 1875 he became professor of mathematics and physics in Wuerzburg at the Agricultural Academy of Hohenheim. But 1876 saw him back in Strasburg at the university, and in 1879 he became professor and director of the University Institute for Physics at Giessen.

ometer to tell the weight of the atmosphere is his invention. In acoustics he studied the sounds emitted when gases are intermittently lighted up.

#### BAY RUM.

[Die Seifen, Oel, und Fettindustrie.]

Oil of bergamot.....	30 gm.
Oil of orange.....	2 gm.
Oil of allspice.....	2 gm.
Rum.....	20 kg.
Water.....	2 kg.
Borax.....	10 gm.

Allow to stand several days and then filter.



We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of any unusual compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the labels used on packages of the compound should also be sent.

**Aluminum Solders.**—Dr. G.—Your request for information on the subject of aluminum solders was referred to the well-known metallurgist, H. W. Edwards, who has favored us with the following reply:

The whole subject of aluminum solders is most chaotic and unsatisfactory. There are dozens upon dozens of formulae, each one alleged by its inventor to be the only practicable solder, while as soon as any one commits a few of the published formulae to print, other solder men who keep their particular mixture a secret, immediately express their derision. It is therefore with some hesitation that I approach this subject.

I ought to begin by a few general remarks for the guidance of your correspondent on aluminum solders in general.

The principal difficulties are: 1, the obstinate resistance of aluminum to "wetting" by the more fusible metals; this accounts for the solder not running between and attaching itself to the surfaces to be united; 2, the difficulty, or impossibility rather, of using a hot soldering "iron" to pick up and spread the solder; the usual method is to heat the work and to place a few grains of the solder round the joint (previously clamped or wired into position), then to work the solder into the joint as much as possible with suitably shaped rods of aluminum.

Roughly speaking, there are two methods. One consists in coating the surface to be soldered with tin, or copper, or a tin-zinc-bismuth mixture, and then uniting the surfaces so coated with ordinary tinman's solder, used in the ordinary way with ordinary tools. What little work I have done with aluminum I have soldered in this manner. I prefer to coat the surfaces with copper by dipping them into a solution of copper sulphate and connecting with a weak current of electricity—say 3 or 4 volts. In this manner I have always had satisfaction. The other method seeks to apply the solder direct to the aluminum surfaces to be joined, which are first thoroughly cleansed by washing in caustic alkali, or cyanide, and then thoroughly washing off in water and drying. The work is then clamped into the position it is to take when united and the junction is heated with an alcohol lamp. Solder is placed around the joint and heat continued until the solder melts. Most of the aluminum solders change suddenly

from the solid to the fluid state. The solder is spread and guided into and around the joint with aluminum soldering "irons."

The following is a list of the solders proposed and more or less in use. It will be perceived that they cover a very wide range of proportions of but few ingredients, and it would seem that almost any haphazard mixture would fill the bill. Copper, because of its color, must be used only sparingly:

#### ALUMINUM SOLDERS.

Aluminum.	Zinc.	Copper.	Tin.	Bismuth.
20.....	80.....	.....	.....	.....
15.....	85.....	.....	.....	.....
12.....	88.....	.....	.....	.....
8.....	92.....	.....	.....	.....
6.....	94.....	.....	.....	.....
12.....	80.....	8.....	.....	.....
9.....	85.....	6.....	.....	.....
7.....	88.....	5.....	.....	.....
6.....	90.....	4.....	.....	.....
4.....	94.....	3.....	.....	.....
30.....	50.....	20.....	.....	.....
20.....	65.....	15.....	.....	.....
20.....	80.....	10.....	60.....	10.....
.....	.....	.....	95.....	5.....
.....	.....	.....	97.....	3.....
.....	.....	.....	98.....	2.....
Lead.....	.....	.....	98.....	2.....
165.....	9.....	.....	100.....	.....

In selecting ingredients for an aluminum solder it is essential that they be free from iron, since insignificant quantities of this impurity have a very deleterious effect on the fusibility and adhesion of the resulting alloy. In fusing aluminum care should be taken not to heat it to any considerable degree above its fusion point.

**Book on Wine Essences.**—I. B. F.—The only book we know of that treats of the preparation of wine essences, liquors, etc., and gives formulas, etc., etc., is Brevan's "Manufacture of Liquors and Preserves." It is published in New York by Munn & Co., and can be obtained through any bookseller.

**The Home Study of Pharmacy.**—C. E. B.—The system of home study of the National Institute has many admirable features and fills a useful purpose. It was never intended, however, to stand in the place of a college course providing for practical work under the personal supervision of the teacher. We do not know of any other system of home study which quite equals that of the National Institute in thoroughness, but its certificate of proficiency has little if any

standing and its chief end is to equip young men for the examinations of the State Boards. Address the National Institute of Pharmacy, 858 Dearborn street, Chicago.

**To Deodorize Benzine.**—S. N.—A process which has given satisfaction consists of mixing the benzine with bleaching powder (calc. chlorata), then adding hydrochloric acid and agitating thoroughly, so as to bring the chlorine gas liberated into contact with the benzine. Now treat the decanted benzine with freshly calcined lime until all odor of chlorine has disappeared.

**To Deodorize Wood Alcohol.**—G. E.—It is practically impossible to deprive wood alcohol of its characteristic odor by any simple process not involving a change in its chemical constitution. The objectionable odor of wood alcohol can be corrected to some extent by treating it with caustic soda and potassium permanganate and subsequent distillation. One ounce of the soda to every gallon of alcohol will be found sufficient. After standing a few days with occasional agitation, it is distilled in a water bath or pharmaceutical still. The first portions of the distillate are returned to the still, and this is continued until the odor of the liquid is changed. The alcohol is then redistilled with potassium permanganate in the proportion of about 1 dram to the gallon. Finally filter through animal charcoal.

**Hair Restorers.**—G. L.—If you mean by "hair restorer," a preparation that will supply nutriment to the roots of the hair and stimulate its growth, the following will probably be found to answer your purpose.

#### QUININE HAIR WASH.

Quinine.....	3j
Tinct. cantharides.....	fl. 3ij
Ammonia water.....	fl. 3iiss
Cologne.....	fl. 3ij
Glycerin.....	fl. 3ij
Borax.....	3ij
Bay rum, to make.....	Q
Mix and filter.	

If desired the above may be colored with a solution of caramel.

#### CASTOR OIL HAIR WASH.

Tinct. cantharides.....	fl. 3iv
Ammonia water.....	fl. 3iv
Castor oil.....	fl. 3iv
Oil bergamot.....	fl. 3j
Alcohol, enough to make.....	Q
Mix.	

#### HAIR TONIC.

Castor oil.....	fl. 3iv
Tinct. cantharides.....	fl. 3iv
Tannic acid.....	gr. xxx
Oil citronella.....	Mxxx
Oil bergamot.....	Mxxx
Oil cloves.....	Mxl
Oil lavender flowers.....	fl. 3j
Oil rosemary.....	fl. 3j
Alcohol.....	fl. 3xij
Mix.	

**Palatable Castor Oil.**—B. R.—A very pleasant emulsion of castor oil may be prepared as follows:

Powdered acacia.....	3iv
Castor oil.....	fl. 3j
Elisir of saccharin.....	Mxx
Oil almonds, bitter.....	Mj
Oil cloves.....	Mj
Distilled water, to make.....	fl. 3ij

Dissolve the gum in sufficient water and add the oil gradually; lastly add the flavoring.

Glycosin, saccharin and dulcin are all soluble to some extent in castor oil and are serviceable for imparting a sweet and pleasant flavor, masking to some extent, the disagreeable taste of the oil.



**American Shaving Creams.**—R. J. B. writes: "We are putting up a shaving cream, and it is not so good as some other creams on the market. Will you kindly quote a few formulas for an article of this description?"

The following are fair types of the shaving creams commonly in use:

#### ALMOND CREAM.

White wax.....	1 dram
Spermaceti.....	1 dram
Almond oil.....	1 dram
Best white soap.....	2 ounces
Eau de cologne, a sufficiency.	

The three first ingredients are melted together and beaten into a paste with the soap and perfume.

#### ROSE CREAM.

Oil bitter almonds.....	1 drop
Oil rose geranium.....	5 drops
Tincture benzoin (simple).....	1 dram
Almond oil.....	1/2 ounce
Cacao butter.....	1/2 ounce
Castile soap.....	1 ounce
Rose water.....	4 ounces
Glycerin, a sufficiency.	

Digest the soap with the rose water on a water bath until dissolved, and add, previously melted, the cacao butter and oil of almonds. While still warm, incorporate the tincture and essential oils with sufficient glycerin to give a proper consistency.

#### TRANSPARENT SHAVING CREAM.

	Ounces.
Potass. carbonate.....	1/4
Spermaceti.....	1/4
Glycerin.....	1
Almond oil.....	2
Curd soap.....	3
Distilled water.....	16
Perfume as desired.	

Cut the soap into shreds, and dissolve it into 14 ounces of the water by aid of a water bath; dissolve the spermaceti in the oil and while warm mix with the glycerin, potash and the remainder of the water. Place in a warm mortar and gradually incorporate the warm soap solution, triturating until a smooth paste is formed. Add the perfume at the last.

offer really close prices at short intervals. There are plenty of things in a general drug stock that can be used for this purpose without arousing the spleen of your touchy competitor. Cigars and tobacco are good because so generally used. If a lot of cigars show a tendency to stay with you, it is better to do some advertising with them than to allow them to crumble to dust under the counter. Suppose you lose a little money once in a while. Charge it to advertising. If it gains you one or two permanent customers it will be money well spent. Soaps, brushes and other articles out of your sundry stock can be made effective leaders. Buy something occasionally with a view to employing it in this manner.

If you sell an article very close it is usually better not to say so. Quote your price and tell what the goods will cost elsewhere. It is just as well to let people infer that this is your regular price. In selling sundries describe them in the minutest manner. Tell everything that customers would or should want to know about them and clinch this description with the price.

I believe that all druggists should have a line of specialties, for their advertising value if nothing else. In this you have an advantage over all other lines of business. The druggist who cannot create a good local demand for a preparation of his own has a poor preparation or is a mighty poor advertiser. You have every advantage over the foreign advertiser who at long range forces the sale of his goods. Successfully advertise your specialties and you bring people to your store that you could not otherwise reach. If their coming does not benefit your general trade there is something the matter with the store.

Make your line of remedies or special preparations with their advertising value in mind. Make them as good as you can, give a liberal amount for the price and always guarantee them. If it's a cough remedy be diligent during the cough season. Change your ads. as often as you can and never use the same one twice. Take up one point at a time and drive it home as forcibly as you can. Keep the guarantee prominent. If you advertise a specialty and let the ad. run over a week you are your own worst enemy. If your preparation amounts to anything you have material for a dozen ads. A dozen points emphasized in a dozen ads. give your advertising a cumulative effect that would be entirely lost if you relied on a single ad. If you appear to have a great deal to tell about your remedy you are bound to make people believe that it has value.

Tell of the chief characteristics of your remedy, how long made, size of bottle



## Advertising Aid, how, when, and where to Advertise.

PRACTICAL HINTS AND SUGGESTIONS. CRITICISM AND CONSTRUCTION OF ADVERTISEMENTS.

In Charge of Ulysses G. Manning.

The department editor will be pleased to criticize any advertisements submitted and to suggest improvements. Questions answered and advice given. Our readers are cordially invited to avail themselves of this help.

### ADVERTISING FOR QUICK RESULTS.

THE druggist who is anxious to see direct returns from his advertising must make up his mind to sell at very close prices once in a while—it may be at a loss. In this business there are just two kinds of ads. that may bring marked returns: First, those relating to your specialties or other articles of which you have exclusive control. Second, ads. that appeal to the pocketbook.

As a rule, druggists are as PRICES. afraid of prices as Satan is of holy water. I find that the suggestion that figures must be given often creates consternation. "There are no cut prices here," says the druggist, "the most friendly feeling exists between the stores, and to give prices would cause trouble." But it needn't. Leave patent medicines alone, use a little native shrewdness and no harm can result. Advertisers, great and small, are forever

talking about prices, claiming that they can save the customer money, and so on. Such claims are worth little unless you occasionally back them up with prices. Why not? Prices are definite things. They give the information the customer has to have sooner or later. People like to know just what a thing will cost them before they go to the store. Not knowing, they may stay away. Put prices into every ad. you can. It is not necessary that they should be extremely low ones always. Regular prices answer just as well many times. When a dealer habitually quotes prices the public assumes that they are low or they would not be given.

People appreciate the moral courage of a man who has fixed prices and who is not afraid to name them. What does it matter if all your competitors sell at the price you quote, as long as they say nothing about it? Three-fourths of the readers of your ad. will draw conclusions favorable to you. It pays, however, to

harmless nature, guarantee, amount sold, what customers say. Give local testimonials if possible. Talk of coughs and colds, their dangers, what they lead to, proper treatment, necessity of having a good remedy in the house, children's coughs, throat troubles, etc. Any of the above points and scores of others might be made the subjects of different ads. Keep the price and guarantee prominent. If the ads. are well written and a campaign of this kind does not bring results you can safely conclude that something is the matter. The size of the ad., the position or the medium may be at fault.

### Criticism and Comment.

#### ADVERTISING PAPERS.

I have received from Fred. Mitchell of Norwich, N. Y., a late copy of his little publication, "Druglets." Dr. J. F. Davison, proprietor of the Mattison avenue pharmacy, Asbury Park, N. J., sends the first issue of "The Pharmacy," an eight-page production of unusual excellence. Quencer's Pharmacy, Ninth avenue and Fifty-seventh street, New York City, submits an eight-page illustrated paper bearing the heading "Points from Quencer's Pharmacy."

### We're Glad You Like Our Way Of Doing Glasswork.

It must be that we have a "knack" of doing it better and different than others. If you have any broken window panes at your house, now's the time to have them fixed. Send your sash to US, we've an expert glazier, who'll set the glass quicker and cheaper than you can.

Mitchell's.

### Does Baby Talk Yet?

Can't you understand that he don't want you to use that old rag to wash him with? Of course he don't, he wants one of those fine silk sponges that we have, that sell for 25 or 85 cents.

Mitchell's.

REPRODUCED FROM FRED. MITCHELL'S  
DRUGLETS.

Of the three, Mr. Davison's production is the most ambitious and in some respects the best. It is handsomely printed on good paper, contains several original half tone illustrations and the matter is timely and excellent. This one was the holiday issue and devoted largely to the lines suitable for presents. Also contained talks on hot soda, cigars, cough remedy and other specialties. Chinked in here and there were bright little items that helped to enliven the pages. A number of them are given here.

SNAP SHOTS FROM DR. DAVISON'S PAPER.

We make prices to fit the times—and we give a good fit.

Hot Chocolate takes the keen edge off the cold days.

In selling cigars, our motto is "a cigar to swear by, not to swear at."

The Prescription Department is the real business end of every drug store.

One bottle of our Corn Slayer costs 15 cents

and slays 15 corns. That is cheap enough in the hardest of times.

A good tooth brush is hard to get. Every one that we sell at 20, 30, 40 cents we guarantee, and our guarantee is good.

Our Corn Slayer certainly does slay corns. It is not as quick as lightning, but it's safer. Fifteen cents.

Many dealers sell "Postillion" cigars three for a quarter and make money. We sell five for a quarter and make friends.

We have a hair brush for 25 cents that is a wonder. All bristles, and you can't wear it out in a year. Then we have other hair brushes that are miracles. Cost from \$2 to \$3, and you can't wear 'em out in a lifetime.

I see nothing to criticise in this paper. Congratulations will be due if the publisher can maintain in subsequent issues.

### A Seasonable And Reliable Friend For These Cold Nights Is

One of our HOT WATER BAGS. Now is the time to buy one, because it may save a severe sickness, to have one ready in case of sudden chills or colds. Heat cures many pains and this is the best way to apply it. Sizes 1 to 4 quarts, Prices, 50 cents to \$3 each.

Mitchell's.

REPRODUCED FROM FRED. MITCHELL'S  
DRUGLETS.

the uniform excellence already attained. About half the space in Mr. Davison's paper was let to other advertisers. The returns from this no doubt covered most of the cost of the publication. This feature may afford a suggestion for those who have the enterprise to get out something of the kind but who have to consider the expense. The ads. of a few non-competing merchants may help the interest and standing of your publication and will not detract from your own ads. a particle.

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The excellent features of Mr. Mitchell's "Druglets" have already been mentioned in this department. His late issue is up to the standard. Some little ads. from it are reproduced on this page.

Mr. Mitchell informs me that his paper is carefully distributed by carrier, placed in mail boxes and handed in at the doors. It is sent by mail to country people.

#### COMIC MATTER IN DRUG PAPERS.

Mr. Quencer's paper is, I judge, one of those that can be bought partially printed. The miscellaneous matter it contains is on the comic order, the illustrations being of the *Puck* and *Judge* variety. This paper also contains some outside advertising. Mr. Quencer's own ads. are good; one of them is reproduced here.

He asks that his publication be criticised. My criticism is a general one and largely theoretical. I doubt the advisability of anything comic in connection with drug advertising. A little touch of genuine humor now and then may do, but the drug business is a serious, dignified one and the advertising should correspond.

Again, it is largely the women who read these papers; they are the chief readers of ads. of all kinds. They do over half the buying and influence the buying of the men. Women are woefully deficient in sense of humor. I never knew a woman to buy a comic

paper in my life, though perhaps many do. I know from observation that the sight of a man stumbling over a coal hod, falling two flights of stairs and bringing up at the bottom in a confused jumble of man, coal hod and misplaced biblical words, does not awaken the same emotion in a woman that it does in a man. Women doubtless miss much by not being always able to see the funny side of things, but we have to take them as they are.

This ad. was accompanied by a cut of a man hailing a hack:

#### STOP THAT HACK.

and be quick about it, or it will get beyond hailing distance. Hacks don't move at a snail's pace; neither do coughs; they move right along, and every moment they're traveling at your cost. It may cost you your health to delay, and possibly your life. That's altogether too large a price to pay for the empty privilege of procrastination. Don't wait for the cough, but stop the hack the very first moment of its appearance by the use of our best Cherry and Tar Cough Remedy. A remedy for the people, low in price, but always effective. 19 cents per bottle, and your money back if you want it.

QUENCER'S PHARMACY.

I notice that Mr. Quencer quotes his Cod Liver Oil Emulsion at 45, 49 and 50 cents a bottle. Little errors of the kind sometimes count.

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#### DON'T CROWD YOUR ADS.

D. S. Carpenter, Middletown Springs, Vt., submits a card advertising Grip Syrup. Your border is too heavy for so small and crowded an ad. The effect will be striking if you will use headlines about three times as large as those now employed and allow 1/4 inch of white space all around between ad. and border.

Written for the  
American Druggist and Pharmaceutical Record.

### Ten Business Maxims.

BY R. J. HARDY.

1. Keep the best of everything on hand and don't forget to tell the people so on every possible occasion.
2. Let all your dealings with your customers be held strictly confidential on your part.
3. Stay in your store and attend to customers personally as much as possible.
4. Label everything and let everything that goes out of your store carry your name on it.
5. Don't criticise a doctor's prescription in the hearing of your customers.
6. Treat all your customers with equal courtesy.
7. Keep a little of everything in your line in stock and don't be out of staple articles.
8. Turn out your prescriptions scrupulously neat, label and bottle exactly clean and wrapped neatly in good paper.
9. Don't stock up with patent medicine simply because the agent offers to advertise them under your name.
10. Don't allow loafing in your store





## NEWS OF THE FORTNIGHT.

### Enforcing the Law.

In Brooklyn a determined effort is to be made to enforce the pharmacy and poison laws. Here, as elsewhere, the only people who obey the law are the pharmacists. Mr. Cameron wishes to ascertain whether grocers and department stores are not amenable to the law as well as druggists (p. 99). In Chicago the first move of the Pharmacy Board has met with a check, the indictments against the druggists having been quashed (p. 150).

In Ohio it is the Food and Dairy Commission which is stirring things up. We devote much space (p. 106) to the matter, and give a number of interviews on the subject.

In Michigan the pharmacists have been having trouble through the enforcement of the local option laws, but a judge in Charlotte has rendered a decision (p. 107) which will prevent their being subjected to needless annoyance on baseless charges, and to the espionage of hired liquor spies.

### The Massachusetts Law.

The Massachusetts Board of Pharmacy have presented an amended pharmacy act to the Legislature of that State. As reported in our news columns, the amendments have met with some opposition from the druggists of the State, but there seems every probability of their ultimate passage. The new act requires biennial registration, with a registration fee of \$1, and incidentally gives the board power to revoke liquor licenses for cause.

### Associations.

The Connecticut Pharmaceutical Association held the first of the annual association meetings for this year in Bridgeport, and we present (p. 100 to 105) a very full account of the proceedings. The amount of interest taken in the association by the pharmacists of the State serves to make the meeting an object lesson which it might be well for the pharmacists from some of the larger States to give their careful study.

## NEW YORK CITY.

F. S. Hubbard, C. W. Snow of Syracuse were in the city a fortnight since.

W. F. Walch will be placed in charge of the new pharmacy about to be opened at Ardaley, N. Y.

Prof. Wm. P. De Forest of 897 Clason avenue, Brooklyn, is having the front of his store repainted.

W. B. Blanding, of Blanding & Blanding, Providence, R. I., was in the city on a short business trip.

The Himrod Mfg. Company have removed from 191 Fulton street, to more convenient quarters at 14 Vesey street.

H. J. Maris of J. M. Maris & Co., Philadelphia and New York, visited their New York house recently.

A. M. Hance, of Hance, Brothers & White, spent a few days in New York last week.

Geo. Taylor of Taylor Bros., the well-known thermometer manufacturers of Rochester, spent some days in this city recently.

J. Murry Taylor of Cambridge, Mass., paid a flying visit to Philadelphia and New York in the latter part of last month.

W. B. Keller, the well-known pharmaceutical writer of Baltimore, paid a short visit to this city recently looking after some of the varied interests in his charge.

J. A. Sangston of the New York office of the Low Art Tile Company, made a flying trip to Philadelphia recently on business.

Peter Lance, the well known traveling representative of Wm. R. Warner & Co., was seen in the New York drug market last week.

Herbert Best, vice-president of the D. H. Fonda Drug Company, Albany, N. Y., has retired from the active management of the business.

Henry Miles of the firm of Leeming, Miles & Co., Montreal, has been elected a member of the Executive Council of the Montreal Board of Trade.

Victor Koechl & Co. is the name of the newly organized corporation who will conduct the business of Schulze Berge & Koechl.

Charles Henry, formerly with C. G. Bacon & Co., is now traveling in the interest of the Mattson Rubber Company, giving most of his attention to the city trade.

F. L. Upjohn, resident partner of the Upjohn Pill & Granule Company, left recently for a Western tour. He will go as far as Denver and will probably be out of the city for about a month.

Charles Black of the class of '87 P. C. P., who has been with Caswell Massey & Co. for some years is now connected with the New York office of the Low Art Tile Company.

"Billy" Ungerer, the well-known essential oil expert, has just returned from a successful trip West. This is his first venture on the road, and will undoubtedly produce good results.

L. Ambos, class of '98, N. Y. C. P., has given up his position with Herman Graesser, at 40 Stanton street, and his place will be taken by Wm. Broesler, N. Y. C. P. '95.

A new drug firm have been formed under the name of Byrnes & Feltus, at Natchez, Miss. They will do a retail and wholesale business. The firm succeed R. L. Byrnes. G. M. Feltus was formerly of Bayou Goula, La.

Frank R. McDermott, the popular treasurer of the Drug Trade Club, has gone to Chicago to establish a branch office of the Nichols Chemical Company, which is made necessary by their increasing business.

Following the excellent example set by the New York College of Pharmacy, the Brooklyn College of Pharmacy has had a bill introduced into the New York Legislature authorizing the college to confer the degree of Doctor of Pharmacy.

F. W. Kinsman, Jr., who was only recently reported as having purchased the drug store of L. Sautter in Grand street Brooklyn, E. D., has resold the place to Mr. Otto Alexander, formerly of Alexander & Van Der Smissen.

R. P. Domschke, one of Williams, Davis, Brooks & Co.'s clever New York salesmen, was one of the unfortunates who suffered from the recent severe cold spell. He was confined to bed for several days with a severe bronchial affection.

Dr. Smiley, Reeder Bros.' genial and erudite prescription clerk, is back at his post again after a three days' siege of illness. His conservatism was shown in his making the trip to Boston to get the advice of his old physician.

Dr. C. W. Brautigan has moved his pharmacy from 197 Wyckoff avenue, Brooklyn, to the opposite corner, bearing the number 199. The new store has been most attractively furnished with new fixtures and has been tastefully decorated. The genial proprietor will be able to take the best of care of his constantly increasing patronage.

Dr. Fred Hoffmann, formerly of the *Pharmaceutische Rundschau*, has been elected an honorary member of the Philadelphia College of Pharmacy. Dr. Hoffmann was to have sailed for Europe about a month ago, but difficulties in the way of disposing of his house and property interfered with his plans, and it may be some time yet before he will leave.

A. H. Rogers of Rogers & Pyatt, New York, appeared before the Commissioner of Internal Revenue at Washington last Tuesday and submitted on behalf of the Legislation Committee of the National Wholesale Druggists' Association a very clear and forcible brief of the case of the manufacturers who have applied for a

rebate on alcohol consumed in the arts under the Hoar free alcohol measure.

One of the new ornaments of Lehn & Fink's office is a frame of handsome specimens of all of the narcotic plants—belladonna, henbane, digitalis, conium and aconite. The plants are complete, consisting of leaf, root, flower, and in some instances fruit. They were framed by Mr. Fink himself on a white background, and attract considerable attention.

The marriage of John Francis Queeny of Merck & Co. to Miss Olga Monsanto of Hoboken, N. J., took place at St. Paul's Church, in that city, Wednesday evening, February 5, at 8.30 o'clock. Admission to the church was by card only. The groom is well-known throughout the United States in the drug trade, and we feel sure will receive the congratulations of his wide circle of friends on his entry into the ranks of the benedicts.

The M. J. Deane plaster factory, at Yonkers, was destroyed by fire on January 31. The works of the Plaster Company were entirely destroyed, involving a loss of \$30,000 on building and machinery, upon which there was an insurance of but \$5000. The fire is supposed to have originated from spontaneous combustion, for it was discovered where cotton was stored.

Thos. F. Main, ex-president of the National Wholesale Druggists' Association, was in attendance at the hearing before the Commissioner of Internal Revenue at Washington, and this coupled with his attendance at the funeral of the late George Bliss, made it impossible for him to attend the banquet of the Connecticut Pharmaceutical Association. Mr. Main is an honored member of the association and he rarely misses a meeting. He was there in time for the final session on Wednesday afternoon.

The business management of the *Alumni Journal* of the New York College of Pharmacy, is now in the hands of Thomas M. Davies, who is in business with his father at 543 Third avenue. Mr. Davies has proved his capacity as a worker in the Alumni Association and he is Hospital Steward of the Eighth Battalion, N. G., S. N. Y. The *Journal* should prosper under his management and the able guidance of Fred. Hohenthal who is its new editor.

The Hegeman Company of 196 Broadway are preparing a big surprise for their patrons. They will close up on Washington's Birthday, the 22d inst., and when they reopen, on the 24th inst., not only will the interior of the establishment be found to have undergone a number of alterations and improvements, but the place will contain a soda water fountain that will prove to be one of the sights of Broadway. The old fountain will be entirely done away with, and the new one, from Matthews', will extend from floor to ceiling. It will be of marble mosaic, with large mirrors, and will be the handsomest and best fountain, so far as convenience for filling and drawing are concerned, that the Matthews have ever put up.

#### Mr. Parmele Takes a Vacation.

Charles Roome Parmele, the widely known proprietor of Arsenauero Mercuro and the other pharmaceutical com-

binations of the rare metals, has sought a brief respite from business cares in a winter trip to the South. He left New York for New Orleans on the 7th inst., and will enjoy the duck shooting of the neighboring waters. Mr. Parmele's health has not been of the best of late, sickness in the family and the strain incident to the removal of his extensive plant to 86 Platt street, all telling on him severely. His many friends unite in wishing him a pleasant trip, big bags of game and speedy restoration to his usual vigorous condition.

#### A Tour through Europe.

Rudolph Leonhard, who will be remembered by a host of friends as the former apothecary to the Vanderbilt Clinic, has just returned home after an extended tour through Europe. The story of his wanderings through France, Germany, Spain, Italy, Austria, Egypt, Greece and the Holy Land would afford fine material for a tale of travel and adventure, and we regret our columns do not lend themselves to this style of narrative. Mr. Leonhard is a graduate of the College of Pharmacy of the City of New York, and some 18 months of his stay in Europe was spent at Munich, in Bavaria, under Professor Buchner, studying the chemistry of beeswax and modern bleaching methods. Mr. Leonhard's father is the proprietor of an extensive wax bleaching establishment near Paterson, N. J., and his son's work in the chemistry of the waxes is likely to be felt soon in improved qualities of beeswax, if that is possible.

#### Marriage of Mr. Good.

Brent Good, whom every wholesale druggist in the United States, and almost every retailer, too, knows as the president of the Carter Medicine Company of New York, was married on the 29th ult. His bride is Miss Frances Colfax Colwell of Brooklyn. Owing to illness in Miss Colwell's family, the wedding was a very simple one, only the near relatives of the contracting parties being present. Mr. Good's best man was his son, Harry Hoyt Good, and his daughter, Miss Kate Hamilton Good was the bridesmaid.

Immediately after the ceremony Mr. and Mrs. Good sailed on the Trinidad for Bermuda, where the honeymoon will be spent. They expect to return about March 1.

#### John M. Peters Leaves the Fraser Tablet Company.

The Fraser Triturate Mfg. Company of this city have been reorganized and John M. Peters, who has been treasurer and general manager for a number of years past, is no longer an officer of the firm. He has completely resigned his connection with the firm and is now to be found at 71 William street, in the offices of the *Oil, Paint and Drug Reporter* and *Painter's Magazine*. The Fraser Triturate Mfg. Company removed their laboratories and workshops to Brooklyn a short time ago, a change necessitated by the demands of a constantly increasing business.

When Mr. Fraser was seen by a reporter for the *AMERICAN DRUGGIST* he

was asked his views as to the future of the tablet triturate and compressed tablet.

"We did a larger business last year than in any previous year, and the capacity of our new factory in Brooklyn, which has only been in running order for a few weeks, is taxed to its full capacity." "But," said our reporter, "we see constant mention in the pharmaceutical press of the decline of the tablet triturate." "Well, the best answer I can give to that is to extend an invitation to you to visit us at our factory. Just step over and see Mr. Hays at the factory, you will get in this way a better idea of the popularity of the tablet triturate and the demand for goods of this class than by any statement I may make."

#### The State Board.

The New York State Board of Pharmacy hold its next meeting for the examination of applicants for registration on February 28, at Albany, Plattsburg, Rochester, Syracuse and Yonkers. The experience of the board has been that the increase in the examination fee has not reduced the size of classes, as anticipated by some. Secretary E. S. Dawson thinks that the provision adopted by the board increasing the size of the examination fee is much better than the proposed idea of reregistration.

#### War on Muslin Druggists in Brooklyn.

Donald L. Cameron, president of the Kings County Board of Pharmacy, has been personally inspecting the drug and grocery stores of Brooklyn to ascertain the extent to which the pharmacy and poison laws were transgressed. Mr. Cameron found a complete disregard of the laws on the part of grocers. He laid the matter before Superintendent of Police McKelvey and called his attention to the law in the case. The result was the following order issued to police captains by Superintendent McKelvey:

I am informed that grocers and other unauthorized persons are selling drugs in violation of law. Grocers in the new wards especially are having drugs on sale. You will therefore strictly enforce, to wit:

AN ACT GOVERNING THE SALE OF DRUGS AND POISONS IN THE COUNTY OF KINGS, STATE OF NEW YORK.

(Chapter 502, Laws of 1879, as amended; chapter 272, Laws of 1886; passed June 12, 1879.)

SECTION 1. It shall be unlawful from and after the first day of October, one thousand eight hundred and seventy nine, for any person, unless a registered pharmacist or registered assistant pharmacist within the meaning of this act, to open or conduct any pharmacy or store for retailing, dispensing or compounding medicines or poisons, or for any one not a registered pharmacist or registered assistant pharmacist to prepare physicians' prescriptions, except under the immediate supervision of a registered pharmacist or registered assistant pharmacist, in the county of Kings.

Mr. Cameron says that the Board of Pharmacy is going to pay especial attention to the dry goods stores. When he was elected chairman of the board he decided that it should take a more active part in suppressing the sale of drugs in these stores. It is well-known that many persons were violating the law, but as the officers of the board were not paid for their work they were somewhat indifferent. Mr. Cameron proposes to see that the law is enforced.

## Connecticut Pharmacists.

**Annual Meeting of the State Association—Bridgeport Pharmacists Banquet the Members—Speeches at the Banquet—A Physician's Tribute to Pharmacists—Dr. George L. Porter on the Status of the Pharmacist—A Lawyer Complains of a Lack of Reciprocity—Pharmacists the Least Litigious of any Class—Work of the Pharmaceutical Press—Details of Business Meetings—Efforts for the Elevation of Pharmacy—Important Papers Read—A Notable Gathering.**

The members of other associations of organized pharmacists throughout the country who are accustomed to meet in annual convention under the most favorable weather auspices, and who make enjoyable summer outings of their gatherings, will learn with surprise that the Connecticut Pharmaceutical Association has for 20 years past met in the most inclement season of the year, early in advance of the time selected by the vast majority of sister associations, and with no inducements to attract attendance beyond the discussion of matters pertaining to the protection of their interests and the elevation of their calling. Connecticut pharmacists thus evidently recognize that there is more to seek for in organization than the mere social enjoyment which it affords. It can be seen in the earnestness of their deliberations that they realize that by presenting a united front and being steadfastly pledged to work for the higher interests of the profession, more can be accomplished for the welfare of the craft than is possible in any other way. One of the important results of the meeting just closed will be the introduction into the State legislature of a bill to appropriate money for the detection and prosecution of unlicensed dealers in drugs and medicines. This is an effort in the direction of restricting the sale of all medicinal compounds to licensed druggists.

**T**HE twentieth annual meeting of the Connecticut Pharmaceutical Association opened at the Atlantic Hotel, Bridgeport, on Tuesday evening, February 4. The convention was called to order by President Charles A. Rapelye of Hartford, at 8.30 p.m. After announcing the absence, through illness, of Frederick Wilcox, the veteran secretary of the association, he announced the following list of applications for membership:

### NEW MEMBERS.

Jos. A. Hays, Theodore Eggleston, New Haven; Frank E. Ballard, Chas. Le Sauer, Alexander E. Kaesmann, Geo. A. Haux, Henry L. Benze, Frank J. Ostrofsky, Wm. Joseph Duncan, Bridgeport; Crayton F. Carpenter, Wm. P. Russel, Andrew A. McCallum, Waterbury; Harrison C. Purdy, Shelton; E. R. La Place, Salisbury; Clarence Dougal, Torrington.

The applicants named were all elected at a subsequent session.

President Rapelye next gave up his chair to Vice-president Gladding and read the following:

### President's Address.

*To the Members of the Connecticut Pharmaceutical Association.*

Another year has run its course and again we meet to review the work of the past year and to plan for the future.

I shall attempt no lengthy prologue, but shall proceed with such matters as present themselves for our consideration.

### THE ASSOCIATION HAS ATTAINED ITS MAJORITY.

At this meeting we attain the age of 21 years, and those who know the history of this association know the great good to pharmacy in Connecticut that has been accomplished by it as year has been added to year and each meeting added to those that have gone before. The interchange of ideas and the knowledge gained thereby has been of great benefit to us,

for by discovering our errors we have gained new truths, and by pushing forward with restless energy to greater knowledge and advancement in our chosen vocation we shall attain the goal of our ambition—better pharmacists.

### THE COMMERCIAL FEATURES

of our business are rapidly assuming greater proportions and demand our attention. The business of the pharmacist at the present day must be conducted on up-to-date methods or he cannot succeed. Therefore let us apply the business methods of to-day to our calling and awake to the situation as it exists, and by interchange of thought and experience seek to better every condition that affects our business. The cutting of proprietary medicines by department stores is a question which has confronted us for several years and still confronts us with ever increasing persistence. The loss of the pharmacist is more than one of dollars and cents—it is also one of loss of prestige as an exclusive purveyor of medicines.

### NO REMEDY YET FOUND.

This prestige is an inherent right which is his by virtue of his education and training. Plan upon plan has been suggested, and some of them tried, to remedy this matter, but so far no effectual remedy has been found.

Medicines should not be furnished to the public except by those who by training know their properties, doses and characteristics.

No trickery or fraud of any kind should be allowed to enter into the dispensing of medicines.

### LIVE UP TO THE PHARMACOPŒIA.

We take for our authority the U. S. P., which is accepted by all courts as the standard authority of the United States, although not legalized by them. Having such authority, let us live up to it strictly and see to it that all prepara-

tions which it orders are made up to the standard which it imposes.

### EDUCATE THE PUBLIC.

I believe the best remedy we have against the cutting evil is to educate the public to use preparations of our own make, and if you do that I advise that you make them and not get some one to do it for you.

The public should be protected in the matter of a uniform standard of quality and strength in the medicines they use and should be protected by law.

### PURE DRUG LAW ADVOCATED.

We are fast coming to the time when it will be necessary that we have a pure drug law, and I suggest that steps be taken at this meeting to secure such a law by the appointment of a committee of three to act with the Legislative Committee in formulating such legislation as may be deemed wise.

### DISPENSING BY PHYSICIANS.

The dispensing by physicians is a matter which causes us a large loss of business and should not, I think, be allowed, as here, as in some other countries, the prescriber should not be the dispenser, since a death certificate might be made to cover a grave error.

### COUNTER PRESCRIBING AND SUBSTITUTION.

Against us the physician urges that we usurp his prerogative and counter prescribe, and he also brings against us the charge of substitution.

While both of these charges may have some foundation in fact, I believe neither of them are practiced to the extent that the physician believes they are, or rather that he is made to believe that they are, by the interested emissaries of some manufacturing pharmacists.

The relations existing between the physician and the pharmacist are not what they should be, and I believe more pleasant relations can be brought about.

I would especially call the attention of the incoming Committee on Pharmacy and Queries to this matter, and suggest that they formulate some queries on the subject and secure the acceptance of same by our members, so that at our next meeting we may have some papers on this important subject.

At our last meeting you authorized the offer of prizes for exhibits and papers, but made no specific appropriation for the same.

I therefore authorized the chairman of the Committee on Pharmacy and Queries to offer prizes to the amount of \$30. He has given the matter careful attention, with what result will be seen by his report.

### SELECTION OF PHARMACY COMMISSIONERS.

It has been my impression for some time that our method, or want of method, in selecting a list of candidates for the important office of pharmacy commissioner was capable of improvement; as usually done by nominations in open meeting after one or two have been named it has not been considered necessary that much care need be used in the selection of the other four or five names.

This I believe to be wrong, as it is vitally important in making selections for so important an office that every name presented to the Governor should be carefully considered and the fitness of each candidate well weighed, as it by no means follows that, although naturally our first choice would head the list, that

the Governor would make that name his choice.

Therefore I believe that the matter demands careful consideration, and I would recommend that a by-law be adopted which shall define a method of selecting a list of candidates for the office of pharmacy commissioner, and would suggest that the selection be made by the Executive Committee at the meeting and that they report to the association at its morning session.

#### ILLEGAL LIQUOR SALES.

I approach the question of illegal selling of liquor by druggists with considerable diffidence and a great regret of the necessity, but I feel that the question must be met, and sharply met, for the small minority who degrade their business by converting their stores into bar-rooms must not be allowed to degrade the business of the large majority who conduct their business honestly and legitimately.

No man who puts over his door the sign of a pharmacist and there sells liquor to be drunk on his premises deserves the protection of the law, and offenders should be cut off from all privileges granted them by the Pharmacy act.

#### LEGISLATION AGAINST RUMSELLERS.

Legislation to stop this evil must be devised, and the proper place for it to come from is from this association, for we must show the next Legislature that we are in earnest in this matter, or the liquor interests will show them that we are not in earnest, and we shall suffer not only the disgrace brought on our most honorable calling, but also the increased cost of license. I speak advisedly in this matter, for those of us who appeared before the last Legislature in behalf of our interests know well what the trend of the arguments in opposition were. It is with extreme regret that I admit that this evil exists, but the unpleasant condition confronts us and requires decisive action on our part, and with the large majority on the side of right, and our own interest in the matter, we should be able to devise means to squelch the evil. I would recommend that a special committee of ten be appointed and that they be asked to give the question careful attention, and if in their judgment it be necessary to call a special meeting of the association, that the president be instructed to call such meeting before or immediately after the time of meeting of the General Assembly.

#### TRIBUTE TO A DEPARTED MEMBER.

I should feel that I were remiss in my duty did I fail to notice the loss sustained by this Association in the death of Ex-president L. I. Munson. This association had no member so faithful to its interests as he. One of the originators of this association, he held alone the distinction of having attended every meeting since its formation; and his devotion to the interests of this Association and of the pharmacists of Connecticut did not rest simply with his attendance at our annual meetings, but he was ever ready to respond to any call which could in any way benefit pharmacy in Connecticut. He has passed away, but leaves behind as a pleasant memory his kindly words, devotion to duty and unselfish interest in our welfare.

That the Legislative Committee did hard and efficient work will, I think, be shown by their report both as regards legislation secured and prevented.

#### DRUGGISTS IN THE LEGISLATURE.

The association was fortunate in having six of its members as members of the General Assembly of the State, and although they were not all members of the Legislative Committee, they all lent a willing hand in the work of the association before the Legislature. An amendment to the Pharmacy act was secured by which the Board of Pharmacy now consists of three pharmacists instead of, as before, two pharmacists and one physician.

This change was desired because with the present plan of practical dispensing examination it was thought that a practical pharmacist would be more efficient than the physician.

#### TO RETAIN SURPLUS MONEY.

We endeavored to secure an amendment whereby all surplus money in the hands of the Pharmacy Commissioners should be paid over to this association. We were unsuccessful in securing this amendment, but had it come up later in



Elbert E. Fisher,

LOCAL SECRETARY AND NOMINATED COMMISSIONER OF PHARMACY.

That the meeting of the Connecticut Pharmaceutical Association, just concluded at Bridgeport, was the success it proved to be was due in a great measure to the untiring efforts put forth by the efficient local secretary, Elbert E. Fisher. This was freely conceded by everybody present, and he has certainly deserved the honorable recognition accorded to him in his nomination as Pharmacy Commissioner for the State. As told elsewhere, he is a graduate of the New York College of Pharmacy, and is the owner of a very prosperous pharmacy in Bridgeport.

the session I have no doubt it would have passed.

#### TO CHANGE THE TIME OF MEETING.

A constitutional amendment changing the time of meeting, which was introduced at our last annual meeting and according to our constitution laid over for action at this meeting, will come before you for consideration. I hope it may receive favorable action as the usual inclemency of the weather at this season makes the selection of a warmer season desirable, and will also, I hope, secure a larger attendance at our meetings.

Should the the amendment be adopted

no meeting would be held until June, 1897, unless you deem it wise to call a special meeting.

Our treasury has been depleted this year to the amount of \$60 by the default of interest on our permanent investment. The principal, \$1,000, will no doubt be paid in full.

In conclusion, I have to say that it is impossible to touch upon all matters that I wish to and some must be deferred, as I feel that we shall have all the business that we can accomplish.

The address was referred to a committee composed of F. S. Stevens, Willis L. Mix and S. W. Smith, who were instructed to consider the recommendations of the president and report at a later session.

#### THE ATTENDANCE.

The following is a list of the members and others in attendance during the reading of the president's address: J. Henry Cody, E. E. Fisher, John A. Levery, William J. Nichols, F. S. Stevens, Bridgeport; H. A. Dupee, Karl O. Cyrus, Lewis F. Curtis, Frank S. Ballard, Bridgeport; Henry M. Bishop, New Haven; Henry C. Boswell, Greenwich; W. A. Bronson, New Haven; William H. Camp, Canaan; David P. Charot, Jewett City; A. S. Clark, Waterbury; J. S. Colburn, New Haven; A. L. Dickinson, Danbury; James Duggan, Norwich; C. S. Finch, Stamford; O. C. Fleischner, New Haven; C. P. Gladding, Hartford; L. H. Goodwin, Hartford; J. A. Hodgson, New Haven; C. S. Holbrook, Norwich; E. A. Hough, Collinsville; W. P. Jordan, Willimantic; C. Kerr, Danbury; R. H. Kimball, Hartford; G. A. Lamping, Meriden; J. W. Lowe, New Haven; E. A. Lavigne, Springfield; C. F. Messenger, New Haven; W. L. Mix, New Haven; W. N. Noble, New Milford; A. H. Rungee, New Haven; T. R. Shannon, Hartford; S. W. Smith, Ansonia; D. G. Stoughton, C. H. Talcott, Hartford; G. F. Tufts, New Haven; John K. Williams, Hartford; F. W. Reeves, Cambridge, Mass.; F. M. Harris, Worcester, Mass.; Thos. J. Keenan, New York.

A number of the leading wholesale firms and manufacturing pharmacists had representatives present, the following being a partial list: Parke, Davis & Co., Dr. H. H. Royce, C. W. Walker, Lehn & Fink, R. R. Lampa; John Wyeth & Bro., M. Smith; Sharpe & Dohme, J. Foerster; Seabury & Johnson, E. A. Lavigne; C. G. Bacon & Co., S. M. Allen; Hance Bros. & White, W. W. Sykes; Fox, Fultz & Co., E. O. Engstrom; Reed & Carnrick, Wm. A. P. Andrews; Max Zeller, Mr. Van Buren; Seely Mfg. Company, J. Frank Gorman.

#### TREASURER'S REPORT.

The report of the treasurer showed that the association had \$1,200 in the treasury and 288 names on the roll of membership. To these 288 are to be added the 15 new applicants who were admitted to membership at this meeting.

#### [PHARMACY AND QUERIES.

The Committee on Progress of Pharmacy submitted a valuable report, which embraced a brief account of the newer discoveries in chemistry and pharmacy within the year, and a list of notes on formulas. Two papers had been submitted in competition for prizes offered by the association, and one of these is printed in this number of the AMERICAN DRUGGIST. The paper on "The Preparation and Preservation of Syrup of Ferrous



Iodide," by Elbert E. Fisher of Bridgeport, which also appears in this number, was a volunteer paper, and the only one of technical interest or value, excepting the chairman's report, which was presented.

A number of exhibits of syrups, elixirs, ointments and proprietary preparations, also entered in competition for prizes, were arranged in the ante room and a committee to adjudicate upon their merits was appointed by the president. The committee was made up of James Duggan, chairman; Henry M. Bishop and Charles S. Finch. Prizes were afterward awarded to the successful contestants.

#### REPORT OF PHARMACY COMMISSIONERS.

The report of the State Pharmacy Commissioners was then presented by Henry M. Bishop, chairman. In this report it was recommended that the examinations of the board be on the same scale as the examination necessary for entrance into high schools. This recommendation was approved. The report showed that during the past year licenses had been granted as follows: Renewals, 667; on examination, 44; on certificates, 23; total, 734. In 97 individual examinations 40 were passed, 44 were granted licenses as certificates of examination, 3 were granted certificates but no licenses and 50 failed to qualify. The average percentage was 75.53. The receipts of the board during the year were as follows: Registrations, \$78; examinations, \$490; renewals, \$1,836; total, \$1,904. Expenditures: Fees returned, \$115; paid to State on account of board, \$204.90; sundries, \$47.18; salaries of commissioners, \$900; clerical services, \$100; total, \$1,367.08. Balance on hand, \$1,367.08; by State, \$536.92; total, \$1,904. Balance in hands of State, \$536.92. Balance in hands of State, February 1, 1895, \$409.50, showing increase for the year ending February 1, 1896, of \$127.42.

An increase in the number of special examinations was made necessary during the year by the new method of examination, which was introduced by the present president of the association, C. A. Rapelye, and unanimously adopted by the board. With the new method the number is limited to ten.

#### IMPORTANT REFORM ADVOCATED.

The following important suggestion was contained in the report:

"The board is of the opinion that the time is not far distant, if it has not already arrived, when some preliminary educational requirement should be made one of its rules, and although aware of its authority under the law to make such a rule, it would be gratifying to the members of the board if the members of the association would give them the benefit of their opinions in regard to the wisdom and advisability of adopting a rule of this kind.

"A certificate of examination equal to an entrance examination to a high school has been suggested as a basis for the adoption of such a rule.

This concluded the routine business of the first session, and an adjournment was made until 9.30, the hour of banquet.

#### The Banquet.

It is only in the Land of Steady Habits that one would look for a banquet on the evening of the first day's business session of an association of pharmacists. The fact that the members of the Connecticut

Pharmaceutical Association are able to sit up, eat, drink and be merry until far on in the morning hours, and then turn up bright and early next morning for the consideration of the weighty technical and trade matters presented to them is eloquent of the moderation and regularity which so characterizes the true Yankee.

The Entertainment Committee who had in charge the arrangement of the banquet hall are entitled to much praise. Elbert E. Fisher, on whom most of the work devolved, was the recipient of many compliments during the evening, and the selection of his name to be presented to the Governor of Connecticut for appointment as Pharmacy Commissioner of the State was a fitting recognition of his unselfish efforts to promote the success of the meeting, as well as of his ability as a



Frederick S. Stevens,  
FIRST VICE-PRESIDENT.

"From good old revolutionary stock comes Frederick S. Stevens, one of the best known men of the city,"—thus runs one of the city records of Bridgeport in its sketch of the gentleman who has just been honored by election to the important office of first vice-president of the Connecticut Pharmaceutical Association. Mr. Stevens has been prominent in the business life of Bridgeport for upward of 30 years, and he is the proprietor of the leading drug store there, as well as one in Danbury. The selection of Mr. Stevens has met with the warmest approval of the trade in Bridgeport.

pharmacist. He is a graduate of the New York College of Pharmacy and a former pupil of the late Professor Bedford.

Frederick S. Stevens of Bridgeport was toastmaster, and filled the exacting duties of this position with noticeable success. On either side of him, as named below, was the following list of guests: H. L. Orters, H. E. Shannon, Rev. L. N. Booth, F. S. Stevens, toastmaster; C. A. Rapelye, Dr. Geo. L. Porter, Thos. J. Keenan, J. T. Lynch.

#### A Pharmaceutical Menu.

The menu of the banquet was a curiosity in its way, being printed in Latin unabridged, as follows:

Ostreæ cerulei puncta.  
Fructum Olivæ. Petioli Apil Graveolentia.  
Cucumeres salso.  
Jusculum regale.

Centropistis striatus bullitus cum Mistura  
ovorum Galli Bankivi.  
Fila Bovis carnis cum Agaricis campestribus.  
Pomæ terræ in modo Saratogæ.  
Meleagris Americana, var. Vermont. tosti.  
Vaccinii macrocarponis fructa saporata.  
Rhizomæ Solani tuberosi contusæ. Pissæ viridi.  
Vinum Saturnium.  
Cremor gelidus in modo Neapolitum.  
Panicia dulcis. Fructa varia. Noces mixtæ.  
Panis biscocetæ cum Caseo.  
Infusum seminorum caffès Arabicæ.  
Folia Nicotiniani Tabaci rotata.  
—Edite, bibite et hilares estote.—

Before each plate was also a neat combination card and memorandum of morocco leather. It was the gift of the J. & J. Eager Company of New York, and proved a very successful souvenir. Then a miniature bottle of "Old Crow," presented by the firm distilling that favored extract, attracted the attention of some, but in most cases it was carried away as a reminder of the event.

#### THE TOAST LIST.

Owing to the unavoidable absence of the Mayor of Bridgeport his place was taken by Attorney J. T. Lynch, who proved himself a most acceptable substitute. Short impromptu speeches were delivered, in addition, by others not included in this list:

1. The City of Bridgeport.  
Attorney J. T. LYNCH, Bridgeport.
2. The Connecticut Pharmaceutical Association.  
C. A. RAPELYE, Hartford.
3. The Clergy.  
REV. L. N. BOOTH, Bridgeport.
4. The Medical Profession.  
DR. GEO. L. PORTER, Bridgeport.
5. The Pharmaceutical Press,  
THOS. J. KEENAN, New York.
6. The Press,  
H. E. SHANNON, Bridgeport.
7. Humorous Sketches,  
By H. L. ORTERS.

#### TOASTMASTER'S ADDRESS.

When the cigars were reached, Toastmaster F. S. Stevens rapped for order, and started the speech-making by saying that the Bridgeport druggists felt it a pleasure to entertain their brother druggists of the State. It was the intention, he said, of the Mayor of the city to be present and offer a welcome to the city, but he was unexpectedly called out of town, and his place would be taken by Attorney J. T. Lynch.

#### A LAWYER'S IDEA OF DRUGGISTS.

In reply Attorney Lynch said he wished that the duty of extending a welcome to the association had devolved upon Mayor Clark himself, because it would afford those present an opportunity to see a representative Bridgeporter, a man who is a hustler all the time.

The relations between the law and the druggist are wide apart. On divers occasions he had had occasion to go into a drug store early in the morning for 5 cents' worth of bromo-caffeine, but he never saw any reciprocity. The druggist never gets into a lawsuit. It had always been a mystery to him to know who the prescription belonged to—the druggist, the physician, or the patient? It would be a good thing, the speaker suggested, that the members contribute \$5 each and have the question settled in the courts.

#### THE ASSOCIATION'S HISTORY.

Charles A. Rapelye of Hartford, president, responded to the toast allotted to the association. He gave a brief history of the association, its prosperous growth and its present flourishing condition. He said that the association was started about 20 years ago with a membership of



25, and its roster now reaches over 800. The society in the past had been very fortunate in the selection of its presidents, and under their care had passed through infancy and youth, but had not quite reached the milestone of manhood. He referred to a number of the presidents who had taken a special interest in the association and who had accomplished much good. He believed that the association was of much benefit to the druggist, especially in preventing legislation against their interest and promoting that which would prove a benefit.

#### THE CLERGY.

In responding to the toast, "The Clergy," Mr. Booth, who was introduced to the gathering as the son of a former member of the association, said he felt perfectly at home with the druggists because of his experiences in early life. The visions of youth had been recalled to him, he said, by the emblems of the noble craft which adorned the *ménu* card. He was not a compounder of medicine to-day, but an expounder of certain theological doctrines.

In closing Mr. Booth said that he too might justly complain of the reciprocity of the druggist. He said that he did not get a chance to talk to many of them in church, but was glad to address them on such an occasion.

#### THE MEDICAL PROFESSION.

Dr. George L. Porter was presented by Toastmaster Stevens as a man of National, State and local reputation, a student of literature and a talented speaker. He reviewed briefly the career of the doctor during the war and in civil life and paid him a glowing and deserving tribute. Dr. Porter responded to the toast assigned him in a most interesting manner and prefaced his remarks with several stories which were very amusing. He said in part:

I esteem it a special privilege to come before you to-night as a representative of the medical profession. Our relations are of so direct and important a character, that, for our own sakes as well as for that of our patrons, they should be most cordial and friendly. Our professional success depends so largely upon the honesty and reliability of yours that we are in no small degree in your hands. No matter how well experienced a physician may be in the selection and the action of drugs—no matter how well advised he may be in the recognition, progress and pathology of disease, if the medicines he selects and the quality he prescribes are not those employed in the compounding of his prescriptions, the result may not justify his expectations and he is liable to unmerited blame and is held responsible for the perchance unfortunate termination of the case.

Therefore the reputation for furnishing pure and reliable medicinal agents, of standard quality and strength, and accurately following the precise prescription is of the utmost value to every member of your association. The medical profession appreciates how much has been accomplished by your association in advancing the requirements demanded for membership. In the last issue of *The Journal*—the organ of the American Medical Association, this advanced position is thus appreciatively referred to:

#### A GENEROUS VIEW OF THE PHARMACIST'S POSITION.

"The physician who looks upon the druggist merely as a purveyor of drugs and considers that his duty is fulfilled when he can simply supply patients with the medicine that he has prescribed, will doubtless in the future awake to the fact that he can call upon an intelligent pharmacist to originate a special preparation in order to combat a certain disease; to analyze various products which have given unsatisfactory results, to accurately perform urine analysis, or to make a microscopic investigation which will lead to important results. Thousands of pharmacists to-day possess the necessary qualifications to thus aid the physician, and with the hearty assistance of the medical profession in the true scientific spirit of recognizing truth wherever it is found and in that broad

liberality which casts aside prejudice and preconceived notions, the higher education of the pharmacist must be eagerly welcomed by the lovers of real progress in the medical profession."

In the more effective derivation of the active principle of curative drugs and their more attractive compounding there is yet room for improvement. Along this line, aided by modern instruments of precision, is to come the next great advance of the science of medicine.

Some have thought that as knowledge develops, medicines will be abandoned, but as I have already shown, drugs will not be abandoned, but more skillfully employed.

Even if doctors should desire to attempt cures without their use, their patients would not allow them. Most people believe that if a doctor does not give them a prescription and only advises them regarding hygiene and diet, they are not receiving professional treatment and they are not getting their money's worth. Until wisdom is justified of her children, the sons and daughters of mankind will estimate the value of professional treatment by the amount of medicine they receive, and the doctor and druggist will continue to flourish as of yore.



John W. Lowe,

SECOND VICE-PRESIDENT.

John W. Lowe, who has been elected second vice-president of the Connecticut Pharmaceutical Association, is one of the best known druggists in New Haven. He entered the drug business soon after leaving school and has remained a devoted disciple of Galen ever since. He is now in his thirty-fifth year, and presents the appearance of a clever, bright and vigorous character, with just enough of Yankee shrewdness in his make-up to form an interesting personality. He is one of the most popular members in the association.

#### THE PHARMACEUTICAL PRESS.

The chairman then introduced Thomas J. Keenan, associate editor of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, who responded to the above toast. Mr. Keenan dwelt on the close relationship which existed between associations of pharmacists and the pharmaceutical journals. The latter, he said, considered it their duty to do everything possible to foster the growth of druggists' organizations, as they saw more clearly perhaps than even the persons directly affected the value of unity of action in all efforts looking to the betterment of pharmacy as a whole. Some there are who hold that the journals have abolished the need of associations, for the reason that whereas the original purpose of associations was to afford a means of interchange of thought and opinion between the members, and for the announcement

of important discoveries in the trade or profession to which they applied, such need no longer existed, authors and inventors preferring to announce their discoveries at once through the medium of professional journals. The speaker said he could not subscribe to this view, but predicted for the future a great accession of interest in trade and professional organizations. He brought his remarks to a close by paying a deserved compliment to the officers of the Connecticut Pharmaceutical Association who, he said, had succeeded in attracting a large attendance of members to the meeting without bait of any kind in the shape of amusements, outdoor games, etc.

After the recitation of some humorous selections by H. L. Orters, H. E. Shannon, city editor of the Bridgeport *Standard*, delivered an eloquent response to "The Press."

Robert Lampa, with Lehn & Fink of New York, spoke for the traveling man. His remarks were short, but pointed. He does not believe that the time has come when the salesman can be dispensed with, but said that they were a necessity and were here to stay. Other remarks were made by ex-President Otis of Binghamton, of the New York State Pharmaceutical Association, Richard H. Kimball and F. M. Harris of the New England Drug Union.

#### Second Business Session.

##### OFFICERS ELECTED.

The second business session was convened by President Rapelye, on Wednesday morning at 10 o'clock. The first thing to come up was the election of officers for the ensuing year. Many nominations were presented and the choice resulted as follows: President, C. P. Gladding of Hartford; first vice-president, Frederick S. Stevens of Bridgeport; second vice-president, John W. Lowe of New Haven; secretary, Arthur S. Clark of Waterbury; treasurer, Lester H. Goodwin of Hartford, re-elected.

Frederick Wilcox, who has served as secretary of the association for the past 17 years, was elected secretary emeritus. He was obliged to retire on account of ill health.

##### REPORT ON PRESIDENT'S ADDRESS.

Following the election of officers came the report of the Committee on the President's Address. The committee first recommended that some steps be taken to prevent the practice of physicians dispensing medicines, but the measure was defeated. Another recommendation of the committee was that the matter of illegal liquor selling, as referred to in the president's address, be referred to the Legislative Committee with instructions to act in the best interests of the association. It was decided that the committee had their hands full of such matters at the present time and this was also voted down.

Another recommendation of the committee was that in the future the names of the candidates for appointment on the State Board of Pharmacy be submitted by the Executive Committee at each annual meeting, but the recommendation was not agreed to.

It was decided to ask the Legislative Committee to arrange for the passage of an act whereby the money now held in surplus by the State Board of Pharmacy revert to the association instead of to the State as has been the custom in the past. A recommendation of the com-

mittee to the effect that three trustees be appointed to take charge of the trust fund was defeated on the ground that it was safe in the hands of the treasurer.

#### FOR PHARMACY COMMISSIONERS.

The next business of importance was the selection of a list of six names, members of the association, which will be presented to Governor Coffin for his consideration in the appointment of a commissioner to succeed Henry M. Bishop of New Haven, whose term of office expires this year. The list named was as follows: E. E. Fisher, Bridgeport; Henry M. Bishop, New Haven; R. H. Kimball, Hartford; J. A. Levery, Bridgeport; J. D. Goulden, Stamford; John R. Pitt, Middletown. Another list was also prepared for 1897, inasmuch as the next meeting of the association will not be held until June of next year. The second list contained the names of S. W. Smith, Ansonia; Frederick S. Stevens, Bridgeport; R. H. Kimball, Hartford; A. N. Dickinson, Danbury; J. D. Goulden, Stamford; H. M. Bishop, New Haven.

#### Final Session.

At the afternoon session, Clark Z. Otis of Binghamton, N. Y., asked the association to indorse the plan of the Universal Trade Association for the suppression of cutting. He explained the workings of the plan, which resolved itself, so far as could be understood, into a system of imposing a special tax on the manufacturers of proprietary remedies. He said that the association had now a membership of 8,000 and had been indorsed by the pharmaceutical associations of Ohio, Michigan, Pennsylvania and Kentucky, and by the local associations of Cincinnati, Cleveland, Toledo and Syracuse. Five hundred druggists had already subscribed in New York, or 95 per cent. of those seen. Every officer of the association, except one assistant secretary, was a retail druggist. Mr. Otis made no positive statements as of his own knowledge, explaining in nearly every instance that "the general manager told me." The general manager should have told him more about the action of the Pennsylvania Association. After some discussion, which was participated in by Messrs. Duggan, Whittlesy and Main, it was resolved to indorse the work of the U. T. A.

F. M. Harris of the New England Druggists' Union was introduced and addressed the gathering on the work of the New England Druggists' Union. He said that he had come to change his views of late regarding the possibility of a majority of the druggists of a town being able to dictate terms to a minority. He once thought it possible that if 98 per cent. of the druggists of a given place were organized they could do this, but he had found out his mistake. The N. E. D. U. were now adopting different tactics. They propose to put on the market a line of preparations of their own manufacture. Fifteen pharmacists of known ability will pass upon the formulas and finished preparations, and with the prestige to be gained from the knowledge of this they hope to supplant entirely the preparations of those who refuse to assist the retail druggist in maintaining prices.

He was followed by Mr. Reeves, who announced that he did not appear as a competitor of Mr. Otis. He gave a brief explanation of the policy and purpose of the New England Druggists' Union, and intimated that a change of tactics had been inaugurated. In place of giving

their attention solely to the commercial side of pharmacy they now proposed to advance the scientific end of the profession, and by improvements along these lines show the public in time that they can best protect their interests by patronizing the educated pharmacist.

James Duggan, chairman of the Committee on Prize Papers and Exhibits, presented his report at this stage, and prizes were awarded to the authors of the following papers: "The Value of a Pharmaceutical Journal to the Pharmacist," by Richard H. Kimbal; "Is it Profitable for the Pharmacist to Manufacture His Own Proprietary Articles," by John A. Levery.

The proceedings were terminated by the installation of the newly elected officers, and the passing of a resolution to the effect that the resolutions of thanks extended by the association to Frederick Wilcox be suitably engrossed and presented to him by the committee having the matter in charge.

## CONNECTICUT.

George Pike, the druggist of E. Hartford, is just recovering from a fall he sustained a short time ago.

Druggist J. T. Eagay of Grand avenue, New Haven, has been in New York taking in the grand opera.

J. O. Loomis has opened the drug store at 259 Grand avenue, New Haven, and not Hall & Loomis, as before reported.

Apothecaries' Hall, at Danbury, has been opened again for business. This place was burned out a short time ago.

Hyatt & Wheeler, druggists of Danbury, have dissolved partnership. William B. Wheeler continuing.

R. G. Cleveland, connected with Thompson's drug store, at New Britain, will shortly wed Miss Grace R. Holley.

Ralph Paine, who has been working in Providence for a few weeks, has returned to New Haven.

E. McQuade of the Bristol Drug Company, at Ansonia, has been visiting friends in Bridgeport.

Druggist S. E. Stillson of S. Norwalk has been quite ill of late, suffering from a severe attack of neuralgia.

Lewis A. Elliott, formerly druggist on Chapel street, New Haven, has gone to the Island of Bermuda for a prolonged stay.

J. Harrison Monroe, the druggist of Guilford, has returned from a pleasant stay of three weeks, spent in Florida and at the Atlanta Exposition.

John Hartigan, a highly-esteemed clerk in Booth's drug store, Bridgeport, died in the latter part of January of malarial fever. The deceased was 19 years of age.

James W. Smith has opened a pharmacy at 28 Main street, Stamford. Mr. Smith is a graduate of the New York College of Pharmacy.

M. J. Holloran, a druggist, at New Britain, has secured a 15 years' lease of a lot on Main street, and upon it he will erect a one-story building and move his drug business there.

N. P. Ward, of Medford, Mass., has been appointed New England, selling agent for the Danbury Pharmaceutical Company. He was for ten years with Schiefelin & Co., of New York.

The drug store on East Main street Thomaston, owned by M. J. Hanley, has been sold to Mr. Loomis, a former clerk. The stock and fixtures will be removed to New Haven, where a store will soon be opened.

Joseph S. Stokes, formerly prescription clerk at John H. Parker's pharmacy, at Meriden, has been taken to the Hartford Hospital, where an operation will be performed by Dr. St. John, two abscesses having formed in his ear.

At the next meeting of the Board of Aldermen at Ansonia, it is altogether likely that Edward Vance, the druggist, will be elected a member of the Board of Charities, to succeed Judge Munger, who recently resigned.

The Ansonia Board of Charities have voted to give to S. W. Smith & Co. the drug business for the next four months. After that the next oldest drug firm will have the business for the succeeding four months.

David Healy of the City Pharmacy, Derby, has been spending a vacation of ten days in Warren, Pa., the home of his friend, J. Louis Nugger of the Stirling Opera House, who accompanies Mr. Healy on his trip.

The suit of Edward Smith of Winsted against the Apothecary Hall Company of Waterbury has been decided in favor of the plaintiff. The suit was brought to recover a bill for oil sold the Apothecary Hall Company by Smith.

Five of the eight candidates for druggists' licenses examined by the State Board of Pharmacy, at Hartford, on January 15, were successful, as follows: Louis N. L'hereaux, Dennis F. Murphy, Greenwich; George L. Ropport and John H. King, Hartford.

There's a chance for some enterprising young man to open a drug store in Bristol. William Aldridge, who owns the Wellington Hotel and the block on Whiting street, offers six months' rent free to the druggist who shall start a store in his block.

Nelson I. Blake, who has been in charge of the branch store of the Bristol Drug Company, at Seymour, has resigned and gone to Stafford Springs, where he will go in the drug business with Dr. La Bonte, formerly of Derby. Mr. Blake's Seymour friends wish him every success in his new enterprise.

Cyrenius Theriault, proprietor of the pharmacy, Putnam, who was refused a drug license by the county commissioners at their meeting on November 22, has made an assignment to Richard Gorman. The liabilities are about \$2,200. No inventory has been taken.

Bacon & Co., bought the drug business of the late Thomas F. Lavin on South street, Danbury, at auction a short time ago. S. M. Aller of Norwalk, was Bacon's representative at the auction, and his bid was \$1,760, which was accepted. The store is still for sale and it is likely some one will buy it out ere long.

A rather interesting exhibit has been in the window of Barnum's pharmacy, at Danbury, for some time. It consisted of an old newspaper announcing the death of George Washington, an officer's commission in the Connecticut Continental militia and an old fashioned dentist's outfit. The exhibit attracted considerable attention.

## MASSACHUSETTS.

BOSTON, February 4, 1896.—A bill has been introduced in the Massachusetts Legislature, providing that all applications for registration as surgeons and physicians shall be made on blanks to be furnished by the Board of Registration and Medicine, and shall be signed and sworn to by the applicants. Only those persons who shall show they are of good moral character, qualified, and give proof that they are 21 years of age, shall receive certificates. The bill imposes a fine of not less than \$100 nor more than \$500 upon a person practicing under an assumed name.

## OPPOSED TO THE REVISED PHARMACY BILL.

In a recent interview, William W. Bartlett, President of the Massachusetts Druggists' Alliance, expressed himself freely upon the Pharmacy bill, which has been presented to the Legislature. The bill, in his opinion, is unconstitutional in several respects. Among the clauses to which President Bartlett takes exceptions are the elimination of the section 7, chapter 318, of the Acts of '85, and the changing of section 8, which permits the board to revoke a druggist's certificate. According to his views of the first clause, it practically deprives druggists of a trial by jury. As to the second, the right to pass judgment in the absence of the accused, is autocratic in the extreme. The proposition that druggists shall pay \$1 on applying for licenses of the sixth class, whether the licenses are granted or not, is strongly scored by Mr. Bartlett; as is also the supplement to this of the board's right to search a man's premises without a warrant.

Secretary Butler of the State Board of Registration considers the bill just, and says that he cannot see how any druggist who conducts his business properly can object to it.

## AT THE HEARING.

Mr. Bartlett represented the alliance at a hearing given by the Committee of Public Health one day last week.

Hon. A. E. Pillsbury stated that he appeared as representative of the Massachusetts Pharmaceutical Association, which favors the codification of the laws relating to pharmacy. Mr. Bartlett stated that Lawyer Pillsbury had been retained by the legislative committee, and that if the Board of Directors of the Pharmaceutical Association had approved the retention, it had no right so to do. The chairman of the committee reminded Mr. Bartlett that the association could fight its own battle outside the committee room, and then went on to say that there are from 2,000 to 3,000 registered druggists in the State, but there are 8,900 certificates out. One man, he said, held three, and the board had discovered that he had "farmed" them out, and that business was being done in three places on his certificates. For one he got \$12 a week; another, \$10, and the third, \$8. The chair further said that business was being done on certificates of persons who are dead. Registration every two years will have the effect of correcting some of these abuses.

## PRESIDENT WHITNEY'S VIEWS.

Henry M. Whitney of the State Board of Registration in Pharmacy stated briefly why the board desires changes made in the law. He said: "First of all,

this new law really consists of such changes and additions as are necessary to harmonize existing conditions, and to determine clearly all powers and duties devolving on or made special charges of the board. The work of the board is reformatory in its character, directed toward the prevention of abuses and not the punishment of offenders." With respect to the granting of liquor certificates, Mr. Whitney said, when the board discovered that a druggist had proved himself unworthy, it should have the power to take away its sanction of his business. This was intended to protect the community from the evil of a rumshop under the guise of a drug store.

## ANNUAL MEETING OF THE DRUGGISTS' ASSOCIATION.

The twentieth anniversary of the Boston Druggists' Association was celebrated recently in Parker's, and the occasion was made notable by the presence of Governor Greenhalge, Mayor Quincy, Hon. Winslow Warren, Collector of the Port of Boston; Hon. William B. Rice, of the Associated Board of Trade, and Hon. Samuel B. Capen, of the Municipal League. There was a large attendance of members, and more than the usual amount of interest taken in the proceedings. At the business meeting, which took place before dinner, the following named officers were elected: President, Ernest C. Marshall; treasurer, Thomas L. Jenks; secretary, James O. Jordan; executive committee, Harvey S. Sears, Charles A. Kilham, William A. Chapin, George W. Cobb, Freeman H. Butler, Charles F. Cutler, Edgar L. Patch; committee on membership, Reuben L. Richardson, George H. Ingraham, Fred L. Carter, George F. Kellogg, William C. Durkee.

Henry Canning, the retiring president presided, and in introducing the after-dinner speakers paid the association a high compliment.

In speaking of the Pharmacy bill, Governor Greenhalge said it had been his desire and aim to retain the best men in the Board of Pharmacy. He believed the druggists had more to deal with than the mere profits of and premiums derived from the business. A true druggist would rather put up a prescription than sell a patent medicine, because in doing so he was developing the professional and scientific elements in the business. He briefly referred to the law of 1885, that had taken from the saloon the business of the drug store. "What we want," he said in conclusion, "is a law that will not grant a license for one thing to be prostituted for another."

Instructive and entertaining speeches were made by Edward S. Barret, secretary of the State Board of Health; C. P. Flynn, of the Apothecaries' Guild; F. M. Harris, president of the New England Retail Druggists' Union, Hon. Winslow Warren, Mayor Quincy and others.

## New Stores and Changes.

S. J. Briggs & Co. will open their third drug store in Providence about April 1.

C. A. Glancy & Co., Pawtucket, R. I., have opened another drug store in Broadway, that city.

Howard Horton will return to Lynn to Dr. Flint's store, and T. J. Donovan will stay with Moulton.

A new drug store will be opened in Siney's building, at the corner of Dor-

chester avenue and Romsey street, by Horace P. Childs of Attleboro.

Improvements are being made in the drug store at Brockton, formerly owned by Frank Swift, but recently acquired by Emerson Goldthwaite.

Joseph I. Moulton has bought the store in Salem previously owned by Frank E. Flint of Lynn and has taken possession.

W. J. Gearon of Salem who was formerly in charge of the Flint store in that city, has opened a store on his own account on Boston street, Salem.

Andrew J. Casey & Co. will open their new store at 44 Market square, Newburyport, this week. They also have an elaborate Low art tile fountain put in.

Towle & Rounds is the way the new sign over the store 309 Pine street, Providence, reads. A superb Low art tile soda fountain is one of the attractions of the store.

F. M. Proctor will open his new and elegantly-appointed store at 263 Highland avenue, Somerville, about March 1. He has ordered a \$2,500 Low fountain.

## PENNSYLVANIA.

## THE PHILADELPHIA DRUG EXCHANGE.

PHILADELPHIA, February 5.—On Tuesday, January 28 the thirty-fifth annual meeting of the Philadelphia Drug Exchange was held in their new quarters in the Philadelphia Bourse, and after the secretary's and treasurer's reports had been read the following officers were elected: President, Edward R. Hance; vice-president, Clayton F. Shoemaker; treasurer, H. B. Rosengarten; secretary, William Gulager; directors, Alexander H. Jones, W. N. Kline, H. N. Rittenhouse, John Fergusson, H. C. McIlvaine, Dr. R. V. Mattison, Charles E. Hires and Walter Smith.

At the regular meeting of the Board of Directors on January 8 an amendment was adopted to Article III. of the Constitution, in regard to increasing the membership fees to \$15 per annum. From the foundation of the Philadelphia Drug Exchange, in January, 1861, until the present time, a period of 35 years, the dues for membership have uniformly been \$10 per annum.

This amendment was unanimously adopted.

The treasurer's report showed a balance on hand at the beginning of the year of \$214.54, receipts were \$1,701.66, expenditures \$1,662.46, leaving a balance of \$253.74.

## EDWARD R. HANCE ELECTED PRESIDENT.

The new president, Mr. Edward R. Hance, has for the past 18 years acted as treasurer of the exchange. During that period he has been very efficient in the discharge of his duties, and has always managed to secure enough funds to keep the organization in the front of the business bodies. About 23 years ago Mr. Hance was president of the exchange, and is thus simply returned to office.

## BORRICHKE &amp; TAFEL ROBBED.

On January 26 the store of the wholesale homeopathic firm of Boericke & Tafel, 1,011 Arch street, was entered and the fireproof safe broken open. The robbers secured \$200 in currency and \$8,000 in registered bonds.

## HONORARY MEMBERS OF THE COLLEGE.

The Philadelphia College of Pharmacy have elected J. H. Maiden, of New South Wales; Dr. Oscar Loew, of Tokio, Japan; P. S. Simmonds, of London, England; Prof. F. E. Lloyd, Forest Grove, Oregon, and Dr. Frederick Hoffman, of New York, honorary members, and A. E. Wild, Darjeeling, India, and William Fawcett, Jamaica, as corresponding members. An amendment has been made to the by-laws in regard to the membership fees of the College of Pharmacy. Heretofore the college has had nothing but full members, now it is proposed to create associate memberships; these members to have the same privilege of all others, except in voting and holding office, and will pay \$3 instead of \$5.

On January 20 the State Board of Pharmacy inspected the Philadelphia College of Pharmacy.

## PHENACETINE SMUGGLING.

The seizure of twelve packages containing 210 oz. of phenacetine from the Red Star Line steamer Switzerland, created considerable excitement in this city, and the arrest of Charles Schmaling, chief steward, and George Goll, steerage steward, Joseph Paulino, who was arrested while carrying the contraband to the shore, and Bennetti, the storekeeper. The first three were held in bail, while the others were held as witnesses. Schmaling and Goll were held at \$1,000 bail, respectively; Paulino was held in \$300 bail, as he knew he was doing wrong in secreting the packages, which was enough evidence against him. There was no evidence that Bennetti, the storekeeper, knew what was in the packages and he was discharged, but put in \$100 bail to appear as a witness.

## Philadelphia Notes.

On January 28 M. N. Kline attended the meeting of the National Board of Trade in Washington.

Schandein & Lind, the popular perfumers, have placed a very fine exhibit of their goods on view at the Philadelphia Bourse.

Shoemaker & Busch, the enterprising wholesale druggists at 602 Arch street, have been compelled to secure the adjoining building, 604, as their quarters have become too cramped.

Mr. Izard, formerly manager of Dr. William McPherson's drug store, at Fourth and Wharton streets, has bought out the drug store of Dr. A. H. C. Rowland, 3,629 Haverford avenue.

William B. Burk & Co., the well known sponge house at Sixth and Arch streets, are getting up a fine display of sponges, which is to be placed in the exhibition room of the Bourse Building.

A meeting of the new officers and Board of Managers of the Philadelphia Drug Exchange was held on February 6. After the organization was effected a dinner was served, and a number of the members made short speeches.

E. G. Haehnlen & Co. will in a short time open the store at the southwest corner of Seventh and Arch streets, with a fine display of sponges. For a number of years this firm have occupied the building, 420 Library street, which will be vacated as soon as the new place is opened.

L. Hassell Lapp, who for many years was president of the Lapp Drug Company, is lying dangerously ill at his home. On January 23 he was taken with a paralytic stroke. At first it was believed that he would not recover, but now the family have some hopes.

M. N. Kline, of the firm of Smith, Kline & French Company, was 50 years old on this day, and he celebrated it by attending the meeting. On the 15th of this month the anniversary of Mr. Kline's entrance into the drug trade will occur. This being the thirty-first year that he has been in the trade.

Howard French, a trustee of the Philadelphia College of Pharmacy, is always trying to do something which will be of benefit to the college, and there is hardly a year goes by that he does not make some token of his love for his alma mater. Recently he presented to the college the library of Dr. Rushenberger. This library consists of many books, numbering over 2,000 volumes. The gift is highly appreciated by the faculty.

## OHIO.

CINCINNATI, February 5, 1896.—During the past fortnight matters have been decidedly warm for the local druggists. Arrests have been made by the wholesale of pharmacists who are charged with selling adulterated goods, and the result is that the members of the craft are up in arms in order to defend their reputations and protect their interests. In other words, the local druggists are going to fight the Food and Dairy Commission to the last ditch, as it were.

This promises to be a bitter and prolonged war, and the culmination will be awaited with deep interest. Local druggists have tried in every way to prevent Commissioner Luebbing from arresting them, but to no purpose. The other day a delegation of pharmacists called on the Commissioner with a view to ascertaining how he felt toward them. A number of the callers were at the time under arrest for selling adulterated goods. "You must either plead guilty to the charge of adulteration or prove your innocence," was all the satisfaction they could get out of him. In consequence several of them

## PLEADED GUILTY

before Magistrate Winkler, and were fined \$25 and costs, which is the minimum penalty. The great majority of druggists, however, are not smitten with the idea of acknowledging themselves guilty without the slightest effort to vindicate themselves before their customers. An association has been formed in consequence with a view of fighting the commission. Many prominent druggists belong to the organization, and all arrangements so far have been made strictly on the "Q. T." Commissioner Luebbing is informed, however, that each member is required to contribute \$5 toward a "fighting fund" and sign an agreement to be in readiness with \$20 more when occasion shall require it. This would raise no mean fund when it is considered that there are over two hundred drug stores in the city. With this fund to back them the druggists intend to take their cause from court to court and leave no stone unturned to "square themselves." Commissioner Luebbing is just as resolute on the other hand, and he says he will continue with the cases of the

druggists, one at a time, until the whole list has been gone through with. This is the situation at the present time, and a merry war will inevitably follow. Of the ninety-two samples of drugs recently procured by the officers of the commission, and turned over to Chemist Fennel, not more than twenty proved to be near the regular standard.

## MORE WARRANTS.

Last Thursday's warrants were as follows:

Selling impure phosphoric acid—Otto Lippert, Freeman avenue and Liberty street; William T. Knemoeiler, Findlay and Baymiller streets; M. Weinberger, Eighth street and Freeman avenue; Bernhard J. Pardig, Wade and Linn streets; Robert G. Wray, Fourth and Mill streets; Albert Wetterstroem, 435 Colerain avenue; A. De Lang, Fourth street and Broadway; W. H. Grothaus, Woodburn and Myrtle avenues; M. F. Keeshan, Gilbert avenue and Nassau street.

Selling impure compound solution of iodine—John Darraugh, Central avenue and Richmond street; J. H. Klaphacke, Clark street, between Linn and Cutter; Edward A. Keeshan Third street and Broadway; F. H. Freerick, Gilbert avenue and Morris street.

Selling impure solution of subacetate of lead—Robert Groenland, Fifth street and Central avenue; D. R. Allen, Race street, near Sixth.

Selling impure tincture of iron—J. D. Diebold, Gest street and Freeman avenue.

Selling impure lime water—Otto E. Kistner, Seventh and Linn streets; Otto Heineman, Laurel and Linn streets; A. Q. Zwick, 532 Elm street; F. H. Semidter, Linn and Findlay streets; and Louis Rosseier, 602 Main street.

Selling other impurities—C. Kampfmüller, Woodburn avenue and Fairfax street; Martin Dodsworth, Seventh and Elm streets; Martin Stoll, 422 Vine street; John Keeshan, Sixth and Walnut streets; A. Rosa, Ninth and Vine streets; and C. A. Doerr, Liberty street and Central avenue.

Some figures from the chemical analyses of Professor Fennel in reference to the alleged adulterated commodities named are given: The phosphoric acid sold by Albert Wetterstroem was 79 per cent. too strong in acid solution; that by A. De Lang, 87 per cent. too strong; that by W. H. Grothaus, deficient in acid strength 15 per cent., and impure; that by M. F. Keeshan, 40 per cent. too strong in acid solution; that by Col. George Kylius, 17 per cent. too strong in acid solution. Frank L. Grothe, it is charged, was selling tincture of chloride of iron that had not been standardized, and which was impure; John Darraugh, compound tincture of iodine that was too strong in iodine by 36.6 per cent.; D. R. Allen, subacetate of lead solution deficient in strength by 32 per cent. and impure; Robert Groenland, solution of subacetate of lead deficient in strength 36 per cent. and impure; J. G. Diebold, tincture of chloride of iron deficient in alcoholic strength and 15 per cent. weak in metallic iron; Edward A. Keeshan, compound tincture of iodine with iodine deficient 218 per cent. and not pure; F. H. Freericks, compound tincture of iodine with iodine deficient 12.7 per cent.

## THE FIRST OF THESE CASES

was heard in Squire Winkler's court the latter part of last week. Frank Freericks, a graduate of the Cincinnati College of Pharmacy, and a well known Walnut Hill's pharmacist, was the defendant. He was arrested for selling impure compound tincture of iodine. After being out all night the jury brought in a verdict of not guilty. The contest was a strictly legal one, and was won on the merits of the defense. It was ably and determinedly contested by Judge Dye for the prosecution, and with a coolness, courtesy and skill by Anthony Dunlap for the defense. The druggists generally feel highly elated over the first victory in the present crusade against



them by the Food and Dairy Commission.

Since the present crusade of the Food and Dairy Commission a number of prominent citizens have spoken in reference to the movement. The general opinion seems to be that the commission is doing the city a great good, and that the movement should receive the hearty support of all.

#### DR. WHITTAKER WAS INTERVIEWED

yesterday, and talked to some length about the situation. He said, in part:

How can there be any question about it? I know nothing of the charges or the findings in individual cases, but I do know much of the fraud in drugs and of our failures in the treatment of disease on account of them. It seems to me there is nothing in the criminal calendar as bad as the adulterating of drugs, and it is only because the public conscience has become blunted by quackery of all kinds in this city that the question could ever come into consideration as to the advisability or justifiability of prosecuting this kind of fraud. There are, of course, many honorable and incorruptible men among the druggists of this city, and it is the peradventure existence of these men which saves us from the fate of Sodom and Gomorrah.

Unfortunately the commercial spirit has become so strong as to have overcome every kind of scruple, even that which ministers to the cure of disease and the relief of pain. It is impossible for us to make bricks without straw. We cannot cure or control disease without pure drugs. Aside from the skill which is necessary to make a diagnosis and the judgment to prescribe the proper remedy, results will depend upon the purity of the preparations administered. It may be safely said of nearly all the proprietary preparations that they are impure, or that they fall short, and the same disqualification applies to many of the standard remedies upon which we absolutely rely.

For instance, we often order creosote in the treatment of tuberculosis, but we get a pure preparation only from certain druggists. We give it chiefly for its purifying effect upon the stomach. Creosote, when perfectly pure, is harmless in almost any dose, but if contaminated with carbolic acid or other impurity, it is injurious to the stomach and actually produces disease of the kidneys. An impure creosote is a poison.

Quinine is another drug which suffers sophistication, for often enough inferior alkaloids of Peruvian bark are mixed with it or sold for it. The salicylates, especially of soda, have come into extensive use and have remarkable virtues in the treatment of rheumatism and allied disorders. These drugs are often so impure as to injure the stomach or actually produce disease of the kidneys in the attempt of nature to eliminate the poisons which they contain.

#### DISTILLED WATER SCARCE.

For a long time it was actually hard to get a pure article of distilled water. Certain remedies, notably the nitrate of silver, are ruined by the presence of any impurities in the water. This list might be long continued. Medical men make loud lament concerning the fraud in drugs. The men who perpetrate these frauds originally are not so much the druggists in this city as the so-called commercial agents of manufacturing firms who are reduced to desperate means in competition. It ought to be known by the people that we have a committee of the best men selected by the physicians and by the pharmacists, whose duty it is to revise the pharmacopoeia at stated intervals and to purify it, as the academicians do the language of France. These men establish the standard of the various remedies. But what good is all of their work, and what good is all the skill of the physician if the standard is disregarded and the vampires who poison our food and drugs may go unpunished.

Dr. Francis Dowling thus tersely expressed his views upon this subject, which is now of such absorbing interest in this city:

I have not given the matter of Commissioner Luebbing's warrants very close attention, but I would say in a general way that any one who does missionary work in regard to giving us pure food ought to have the unqualified support of every good citizen. I think that especial care should be taken that our supply of milk is pure, for this is largely the food of infants and very young children. The nourishment of these little tots, in the early stages of their development when the physical mold, so to say, is being formed plays a very important role in their future well being, and the matter of having physically and mentally sound citizens is governed in no small measure by the quality of food furnished during this development period of the

individual. It is a well-known fact that our hospitals and asylums contain numerous incurable cases, which date the incipency of their ailments back to the years of early childhood.

I think that our druggists, as a class, are honest and endeavor to furnish pure medicines; those who are derelict in this regard should be severely dealt with. Give Commissioner Luebbing a helping hand in his good work, for he deserves it.

Dr. H. S. Hussey, when consulted upon the work of the commission, stated as follows:

In reply to your request for an expression of my opinion on the action of the State Dairy and Food Commission, I wish to state that I believe it is doing a necessary and good work, and should receive the support of all public spirited people. In regard to the justice of the arrest of dealers in impure butter, milk, eggs, etc., or in fact any impure article, there can be no question. They should not only be arrested, but punished, and the punishment should be sufficient to correct the evil.

Mr. Cavagna, of Cavagna & Son, asked what he thought of the movement, replied:

No more needed laws were ever passed by the Ohio Legislature than the pure food laws, and I am personally glad to see them properly enforced.

No dealer should be allowed to sell impure or adulterated goods, but ought not some amendment be made to the law, as it now exists, to protect the retail dealer as well as the purchaser? As you buy your goods of the grocer, supposing, of course, that they are what they are represented to be, so the grocer buys them of the wholesale dealer. Now, if the goods you buy are impure, you can sue the grocer, but the grocer can sue no one, as the dealer from whom he buys or the original manufacturer of the article is generally outside the jurisdiction of the State. That does not seem quite just.

A member of the firm of Joseph R. Peebles' Sons when interviewed, said:

Why, of course, we favor the movement. Nothing would please us more than to see the edible goods sold to the people raised to the standard which the State requires.

#### OTHER OPINIONS.

The opinions expressed by some of the wholesale houses differed little, but the general trend was that the law could not be applied directly to them.

We receive our goods, said one, in boxes or crates with a label on the outside. We never even open the box, let alone examine the contents. If a customer comes in and asks for a certain brand or line of goods, we give him what he asks for, never knowing what the goods are like. If they are what he wants and pleases him, that is all we have to do with it. If the Food Commissioner comes down here, takes a sample from one of the boxes, concerning which we know nothing, except by the outside label, analyzes it, and finds it impure, can he prosecute us? No, I think not. A like case has been tried, and if I am not mistaken was decided in our favor.

A lawyer of considerable prominence in answer to the question, replied:

Legally, a man is accountable for what he sells. It makes no difference whether he knows it is impure or not, if he sells it to the buyer as a stated article, and it is not that article, he is responsible to the full extent of the law. Why, if a man sells you a lot of counterfeit gold dollars for fifty cents apiece, and you are caught with the counterfeits in your possession, do you think you could go free by saying you believed they were genuine because some one told you so, especially when you knew you were buying them at a price far below the cost at which the standard real article could be manufactured? If you will read the laws touching on this subject you will find they are all responsible.

#### AN EXPLOSION IN CLEVELAND.

A rather mysterious explosion occurred in George Schade's drug store in the Odd Fellows' building on Washington row on January 20, about 8 o'clock, and as a result a large amount of damage was done, particularly to the reserve stock. The explosion, which occurred immediately after one of the clerks had lighted the gas over a sink near the rear of the room, is supposed to have been caused by escaping gas from a pipe

leading down from the center of the ceiling into the laboratory. There was a very light report, but the agitation was so strong that the glass in the main doorway in the front part of the room was shattered into fragments, while the frames of the door were forced out several inches from the fastenings.

Mr. Schade was standing behind a counter in the center of the room when the explosion occurred, and together with the two clerks made a hasty exit. In passing through the door Mr. Schade cut his right hand. There was very little flame, the only blaze being occasioned by the burning of a small portion of the paper on the ceiling. The room was filled with smoke, however, and this penetrating the boxes containing drugs and other articles damaged them considerable. Mr. Schade closed up his store until the insurance adjuster had time to investigate the loss.

## MICHIGAN.

DETROIT, February 8.—Frank Brainard, a druggist at Charlotte, Mich., was charged with a violation of the liquor law in keeping a drug store not in compliance with the restrictions and requirements imposed upon druggists and registered pharmacists by the general statutes of the State. The prosecuting officer relied for conviction upon the proof of a single unlawful sale of liquor and the question before the court was whether under the information a conviction would be justified upon the proof. Brainard was convicted in the Circuit Court and the case was carried up. Last week the Supreme Court decided that a druggist cannot sell liquor as a beverage or without complying with the statutory laws and escape responsibility for the act. But it is said that a charge of this nature based upon the proofs of a single sale, is an attempt to charge a distinct offense of an invalid and unlawful sale under such general language that the accused is given no information of the precise offense, which it is the intention of the prosecution to prove. If the contention of the prosecutor is sound, the court says, then under such a general information the slightest infraction of the regulations relating to druggists would render the pharmacist liable for keeping a place prohibited by law. Such, it is declared, was not the intention of the legislature. As is well known, Eaton County, in which Charlotte is located, is a rabid local option section, and a large number of druggists were concerned in the decision, they having been convicted of violating the law once. The liquor cases against all the Charlotte druggists have been *nolle prosequi*. The local option fanatics employed a special officer to get after them. This decision will do away with this espionage.

A. H. Lyman, president of the A. H. Lyman Company, at Manistee, Mich., recently died. He was a well-known citizen, and the drug company which bear his name do a large business in the northern part of the State.

#### Michigan Mention.

Governor Rich has appointed George Gundrum of Ionia as member of the Michigan Board of Pharmacy.

Fred. R. Fuller, formerly of the City Drug Store, at Newberry, is at present in Los Angeles, Cal.



G. John Schrouder, formerly a druggist on East Bridge street, Grand Rapids, recently died at Denver, where he went for his health. The remains were brought back to the Michigan city for burial.

Stephen Clinton, a drug clerk here, recently got into a row with Jimmie Morton and stabbed him. Morton died of his wounds and Clinton has been arrested on the charge of manslaughter. He pleaded not guilty and was allowed to go under \$1,000 bail bonds to appear for examination.

S. D. Roche, druggist and prominent business man at Concord, died last week of Bright's disease. He was a Canadian by birth and went to Concord in 1891, when he purchased the Champion drug stock, of which he was the proprietor at the time of his death. The remains were taken to Ludington, Mich., for burial.

## ILLINOIS.

### Chicago Office of the American Druggist.

For the convenience of our large and rapidly growing circle of friends and patrons, both in the retail and wholesale drug trades, we have established a branch office at 60 Wabash avenue, Chicago, where our local representative, CHARLES J. CHAPMAN, will make all friends of the AMERICAN DRUGGIST heartily welcome.

### JUDGE DUNNE QUASHES INDICTMENTS AGAINST DRUGGIST REEVES.

CHICAGO, Feb. 8.—In a lengthy opinion Judge Dunne granted the motion to quash the indictments against J. W. Reeves, recently indicted on eight different charges of violating the State pharmacy laws. Reeves keeps a drug store at 323 State street.

The motion to quash was made upon the ground a Judge in the Criminal Court had no jurisdiction, as the acts alleged were not comprised in the criminal code and were not declared misdemeanors.

Judge Dunne held that action against pharmacists charged with violations of any provisions of the pharmacy law should be brought in some civil court of record or before a Justice of the Peace, and it was wrong to begin prosecution by securing indictments.

The decision practically knocks out all the indictments—200 in number—found against 50 druggists by the December Grand Jury.

Assistant State's Attorney Bottum, who has charge of the pharmacy cases, was inclined to question the opinion of Judge Dunne, but said he had not given the matter enough thought to express a decided opinion.

Judge Goggin yesterday afternoon intimated he would hold the indictments against druggists accused of violating the pharmacy laws were good under the law. His Honor said he thought under the law he could not do otherwise than hold the misdemeanors charged were indictable offenses.

Attorneys E. Erskine McMillan, G. I. Cremer and E. E. Perley argued motions to quash indictments found against William Droegmueller, Thomas Lonergan and others, urging the points made by Judge Dunne in his decision.

Assistant State's Attorney Bottum said the Legislature had plainly made the violation of the pharmacy law a misdemeanor, and also had directed that the

prosecution of misdemeanor shall be by indictment. He also said the Supreme Court has decided misdemeanors are within the jurisdiction of the Criminal Court.

"Well, I think the decision of the Supreme Court is in direct violation of the constitution," said Judge Goggin. "But I must follow the decision of the Supreme Court. I can't overrule it."

"I understand Judge Dunne said to day the pharmacy cases ought not to be tried in the Criminal Court," observed Assistant State's Attorney Bottum.

"Well, Judge Dunne and I never did agree on legal points," said his Honor.

The cases finally went over for further argument next Monday afternoon, at which time Judge Goggin will render his decision.

### News of the Town.

G. W. Sayles, until recently traveling for Hance Bros. & White in Wisconsin, is now with William R. Warner & Co.

A. Oberman, druggist, at the corner of North Clark and Kinzie streets, died at Pasadena, Cal., on January 19. The funeral took place at Aurora, Ill.

Victor Barothy, agent of the Low Art Tile Company, recently secured an order for a 12-foot art tile soda fountain for Roger & Diamond's pharmacy in the Great Northern Hotel.

A. E. Remick, manager of the Chicago office of William R. Warner & Co., says that business during January showed a great improvement over the corresponding month of last year, and he considers the outlook for trade improving.

E. Von Herrmann, druggist, at Thirty-first street and Indiana avenue, who recently made an assignment, has made an arrangement with his creditors, and the business will be carried on under a trustee until all claims are liquidated.

Mr. James B. Herron, who was for some time past connected with the Hartt Mfg. Company, has severed his connection with them and is now the manager of the Onyx Soda Fountain Company of this city.

The Gross & Delbridge Company's Homoeopathic Pharmacy was removed this week to the corner of Wabash avenue and Washington street from 44 Madison street. The new store, which has a frontage of 40 feet, on Wabash avenue and 40 feet on Washington street, presents a very attractive appearance.

The Chicago C. O. Union have completed their new plant at Chicago Heights, a new manufacturing town on the Chicago & Eastern Illinois Railroad. They are making all kinds of apparatus for use with liquid carbon dioxide. The works, which cover about 1½ acres, are complete in every detail.

The faculty of the School of Pharmacy of the Northwestern University tendered a reception to the students of the institution and their friends at the school hall, Twenty-third and Dearborn streets, January 25. The laboratories were thrown open to inspection, and for a few hours the college took on a new aspect. Professors Oscar Oldberg and John H. Long gave interesting talks. Professor Long illustrated his lecture with stereopticon views. In the microscopical laboratory a microscopic soiree was in progress. The purpose of the reception was to interest the students in branches which they have not taken up and to give their parents and friends an opportunity to learn something of the working of the school.

An explosion of chemicals in the laboratory of the Swanson Rheumatic Cure Company, corner of Monroe and Dearborn streets, on the morning of January 24, caused a fire that did considerable damage to the offices on the second floor of the building. Henry J. Bradwell and J. S. Robinson were both badly burned, and Mabel Finnerty was injured by jumping from a window. The damage done to the building amounted to about \$15,000. The building, which is principally used for office purposes, was the scene of a wild rush for the street. Fortunately the injuries were confined to those employed by the remedy company.

Owing to a steadily increasing Western trade Messrs. Whitall, Tatum & Co. of Philadelphia and New York have decided to move their Chicago office and sample room from the corner of Randolph and Franklin streets to 196 Randolph street, where they have leased the ground floor and basement. The new store has a frontage of 20 feet. The premises will be remodeled according to plans suggested by John F. Matthes, the Chicago manager, and everything will be done to afford the trade an opportunity to thoroughly inspect the large line of sundries carried by this well known house. They will take possession about the first week in April.

## MISSOURI.

ST. LOUIS, February 8.—For the past two weeks trade has been unusually brisk. The wholesale houses and traveling salesmen report a similar condition all over the State. This is due to the variable weather which we have been having. It has caused a great deal of general sickness, which probably will not abate until the weather becomes more settled.

### A NEW SYSTEM OF DELIVERING GOODS.

Several of the druggists along Broadway have been working the gripmen and conductors on that car line, until now, when they are in a great hurry for something, they telephone the wholesale house and have it put on the cable car. The conductor knows it means a cigar for him, and he sees that it reaches its destination with the least possible delay. Otherwise the druggist would have to send his boy after the article, taking a long time and car fare both ways, or misfill the prescription or lose a sale.

### STILL WORKING FOR AN EXTRA MEETING.

A few days after the last meeting of the Board of Pharmacy in this city, when the 54 young men received their "regrets," most of them began to think pretty seriously about when they could try it again. They did not like the idea of waiting until next October, when the board meets again in this city. To go to Kansas City in April means a big expense. They held a meeting and drew up a petition. In this they ask the board to hold a special meeting in St. Louis in April. Those who sign this petition agree to pay the regular fee of \$3. They also forfeit the privilege of a second trial for the same fee in case they should fail to pass. Over 50 applicants have already signed this. They expect to present it to Secretary Sennewald in a few days. By the next issue it will be known whether the board grants the request or not.

### AFTER THE BALL.

The entertainment and hop given by the Alumni Association of the St. Louis Col-

lege of Pharmacy on the night of January 27 was a grand success. The entertainment was much better than had been anticipated by those who attended. The participants were all well known in drug circles of the city. The entertainment was, as stated, a comico-tragic opera.

Several of the drug clerks about town fixed up various bouquets and presented them to the actors. Emiel Bernius, head clerk for the Wolf-Wilson Drug Company, was presented with a head of cabbage having a bunch of celery in the top, a carrot for a handle, and the cabbage was surmounted with toothpicks. Several of the other young men who participated were treated similarly. The ladies all received elegant floral gifts. Supper was served at 12 o'clock and dancing continued until morning. Nearly all the prominent druggists of the city were there. Every one enjoyed it immensely. Chas. Lips had charge of the entertainment and took the leading rôle. He deserves much credit for the success of the whole affair.

#### A LABORATORY EXHIBITION.

During the college term each professor of the St. Louis College of Pharmacy delivers a special lecture under the auspices of the Alumni Association. Next Friday night is Professor Hinrich's turn. Instead of a lecture he has arranged for his senior class in chemical laboratory to give an exhibition in quantitative chemical analysis. The application of recent gasometric methods to the testing of pharmaceutical products will be given special prominence.

#### ARRANGEMENTS FOR COMMENCEMENT.

At the last board meeting of the College of Pharmacy a committee was appointed to select a hall in which to hold the commencement exercises. For a number of years past the Memorial Hall has been used for this purpose. Those who attended the last two years will well remember how crowded it was. The committee will probably select the Germania Hall this year, as it is much larger and more suitable for the occasion.

#### The Latest News.

H. C. Mathison is in town drumming up business for the Bromo-Seltzer folks.

The O. B. Strub pharmacy, at 8947 Kossouth avenue, was recently closed by creditors.

The old U. S. Boone store, at Twelfth and Olive streets, is being moved down to Michigan avenue and Kansas street.

The store formerly at Fifteenth street and Washington avenue is the one that recently loomed up at Union Station.

It is reported that a new drug store will soon be opened near King's Highway on Easton avenue.

J. B. Graff will soon move his drug store from 4007 Lee avenue to Lee and Neustead avenues.

Dr. C. I. Wyche is in the city looking after the interests of the Arlington Chemical Company of Yonkers, N. Y.

The Allan-Pfeiffer Chemical Company are now settled in their new quarters at 815 North Seventeenth street.

The drug store formerly at Thirteenth street and Washington avenue is now located at Aubert place and Suburban road. J. R. Douglas is still proprietor.

Dr. J. H. Thierauf, Morgonford road and Connecticut street, was married last

week to a very wealthy young lady in the neighborhood.

G. W. Wilson of the Wolf-Wilson Drug Company was married to Miss Minnette Meyer on January 22. The young lady was formerly cashier for this firm.

Dr. Pfeffer, formerly of the City Hospital, has purchased the drug store at Twelfth and Lafayette avenue. This store has changed hands twice during the last month.

W. E. Blackwell, for some time in charge of Dr. Higgenbotham's drug store, at De Soto, is now putting in a stock of drugs in the new building at Broadway and Souldard streets.

Wm. C. Bolm, one of the best known pharmacists of St. Louis, will soon enter upon the study of law. Mr. Bolm has made a success of all his undertakings so far.

Max Knock, Ph.G., has resigned his position in the store at 4100 Finney avenue, and may now be found in the Arcade Pharmacy, Fourteenth street and Washington avenue.

Albrandt & Sons have sold their drug store, at Fourteenth and Washington streets, to the Meyer Bros. Drug Company. The store will soon be moved to the western part of the city.

H. T. Reuter, formerly with the A. G. Wellmeyer Drug Company, Twenty-fifth and Bremen streets, has purchased the R. J. Renne drug store, 914 South Fourteenth street, and is giving it a thorough overhauling.

The "Grave Yard" Drug Store, at Eleventh and O'Fallon streets, has again opened its doors. This time a young enterprising pharmacist has it in charge, but he don't want his name given until he sees how things are going to turn out.

### The Rival Hungarian Aperient Waters.

Legal proceedings between the owner of the Hunyadi Janos springs and his English concessionaires, the Apollinaris Company, and other circumstances, have testified to the strained relations between these famous houses, notwithstanding the prosperity which must, we presume, have been common to both. Latterly we heard it stated that there was a final rupture between them, and certain new copy for an advertisement received from the Apollinaris Company for the *Diary*, 1896, seemed to be confirmatory of this rumor.

The subject was of sufficient trade interest to take the C. & D. Town Traveler to the offices of the Apollinaris Company in Stratford Place, W. The Apollinaris Company is renowned for the energetic manner in which it conducts its business, whether in regard to lawsuits or advertising. But these new offices in Stratford Place were a revelation. There is as little display as possible outside, but the visitor enters on the ground floor into a spacious and substantially furnished room which corresponds to a city bank, where some two or three dozen clerks are busily engaged in recording the profits acquired from selling water. If the beverages dealt in had been alcoholic, the signs of prosperity could not have been much more striking.

The C. & D. T. T. was conducted into the department of Mr. Julius Prince, one of the directors of the company, another room of vast dimensions, separated from the general office, and Mr. Prince guided

him by devious staircases to the office of Mr. Steinkopff, another director—if a salon which was probably once a ball-room can be called an office.

In reply to a comment on the imposing appearance of the office downstairs, Mr. Prince said that the clerical work of the home business exclusively was carried on on the ground floor. Their export trade, he added, was conducted on the second floor. The first floor was their "Springs" department—that is, where they carry on their correspondence with the Continental establishments from which they draw their supplies.

"Yes, it is the fact that we are giving up our concession for the supply of the Hunyadi Janos water next March," said Mr. Steinkopff. "Our contract was made in 1875, and would expire at the end of the century. But we have exercised our option to determine it earlier. Our relations with Mr. Saxlehner have been strained almost from the first. We spent £54,000 in introducing the Hunyadi Janos water and in extending its sale. That expense fell upon us exclusively, and we have considered that we were entitled to more support from the Saxlehners. We do not think they have protected us so well as they might have done from the importations of the water from the Continent by other firms; we have believed that the water supplied has not always been, as it should have been, from the richest springs; we worked up the trade to 1,500,000 bottles a year, which was the extreme limit contemplated when the contract was made, and then Mr. Saxlehner wanted to make new conditions if we went beyond that quantity. So we have been in continual disputes with him and his successors, and have had several lawsuits with them, as you know. Some five or six years ago I bought an estate near Budapest, in the bitter water district, with springs on it which yield a very rich bitter water, and it is this water which we propose to sell in the future. These springs have been placed under the control of the Royal Hungarian Chemical Institute (Ministry of Agriculture), Budapest, and we shall be able to guarantee that uniform strength and composition which many eminent members of the medical profession tell us is of great importance."

"And the name?"

"It will bear the trade-mark 'Apenta,' which has been registered. But it is drawn from the Uj Hunyadi springs."

"Are there many Hunyadi springs?"

"Certainly. Hunyadi has become a generic name for the bitter waters of Hungary. There is Hunyadi this, Hunyadi that, Hunyadi t'other. (Mr. Steinkopff gave these titles in the original Hungarian, and mentioned about a dozen of them.) Hunyadi, you know, was a famous Hungarian hero, who defeated the Turks several centuries ago. Janos is simply John. In America there are half a dozen Hunyadi waters sold side by side with Saxlehner's."

The new label for the "Apenta" water, proofs of which Mr. Steinkopff had before him, will be a very characteristic one. It will surround the bottle and will be of a bluish-gray ground, with the word "Apenta" crossing a red egg. On another part of the label is a yellow square bearing the well known red diamond trade-mark of the Apollinaris Company, Limited. In closing the interview, Mr. Steinkopff said the price for the new water would be such as to defy competition.—*The London Chemist and Druggist*.

## HINTS TO BUYERS.

J. Hopkins of Lynn, Mass., who is refitting his drug store at great expense, has ordered a handsome set of new counter and prescription Torsion balances. They will match the wood of the fittings and add to the beauty of the place considerably.

We would advise our readers to take advantage of the liberal offer of the Flag Salt Remedy Company of Savannah, N. Y., who will send, free of expense, one dozen packages of their 10c. size and 800 samples to any druggist who will agree to distribute them.

Fifteen years of careful study of the requirements of the drug trade in the matter of Corks has enabled the Paddock Cork Company, 21 Dodworth street, Brooklyn, to turn out Corks which for prescription use leave nothing to be desired. Write them for free sample and price on their Prescription Corks, for they can give you some valuable pointers.

George Klotz of Ed. Pinaud's arrived from Europe on La Touraine on the 2d inst. He will remain here about three weeks before returning to the home office at Paris. In the meantime the importation offices, at 46 East Fourteenth street, report enormously large sales of their new production, *Violette Reine*, which seems to have largely caught the fancy of the fair sex.

Theodore Noel, geologist, 857 West Polk street, Chicago, has a breezy, straightforward announcement to druggists on page 15 which will bear reading. He says that he is able and ready to prove that he has got something which sells as nothing ever sold before, and which will make money for every druggist who handles it, and he proposes to prove this at his own expense. Write him a postal card to find out about it.

Externals count for a great deal with the public, and a good package neatly put up predisposes the public in the favor of any druggist. This fact can be taken advantage of by the shrewd business man by using only the best and most artistic Boxes for pills, powders, etc. The E. N. Rowell Company, Batavia, New York, have made a careful study of the needs of the druggist in this line, and they will send you, on application, a pamphlet which will give you some valuable ideas upon this subject of proper boxing.

One of the objections to most of the Kalsomines on the market is that they have to be applied hot. While this may appear to the uninitiated as a simple matter it becomes a very serious one in practice. The Troy Cold Water Kalsomine Company of Troy, N. Y., have devised a Kalsomine which works equally well with hot or cold water, and they sell this at a price which is really no more than what is paid for the ordinary hot water Kalsomine. They have a special offer in their advertisement on cover page which every druggist should read.

This is just the season when provident housekeepers cast about for plans as to their summer campaign against the various insects which most affect the dwellings of man, and the knowing pharmacist will be prepared by having in stock a supply of Mrs. J's Bug Exit, which is made, sold and warranted by the New York Mfg. Company, Schenectady, N. Y.

This preparation is warranted both to kill and to sell, and druggists who want to carry a profitable article should write them for circulars and prices.

A very interesting exhibit is to be seen in the offices of Johnson & Johnson. It consists of two long glass tubes. One is filled with the most heterogeneous collection of food, digestible and indigestible, imaginable, in layers, and the list includes cheese, mince pie, fried sausage, cod fish, roast beef, tapioca, mixed cake, crackers, salmon, etc. In the other tube is the same conglomeration, only that it has been digested by the action of Papoid, the powerful digestant for which Johnson & Johnson are the sole agents.

The Low Art Tile Company of Chelsea, Mass., originators and sole manufacturers of Low Art Tile Soda Fountains, enter upon their sixth year under the most promising auspices. The number of their January orders are far in excess of any previous year, while the outlook for a steady increase in the season's business is most encouraging. For so comparatively young a concern this company have made marvelous headway, and are already abreast with some veterans whose boast is—"A half century in the business."

Dispensers and purchasers generally should bear in mind that Antikamnia is never put up in bulk. It is always sent out in ounce packages, and every tablet of Antikamnia and of Antikamnia combinations bears the monogram A. K., together with the letter or letters of the other substance forming part of the tablet. C A K, for instance, is shown in monogram upon the 5 grain Antikamnia and Codeine tablet. The Antikamnia Company employ no agents or salesmen of any kind, consequently any person peddling Antikamnia and representing himself as agent to the company may be pronounced a fraud.

## Perfume Travelers.

Williams, Davis, Brooks & Co. of Detroit have ten men traveling in the interest of their perfumery department, their names and territory being as follows: C. H. Cobleigh, New England States; E. F. Stout, New York State; J. C. Steel, Atlantic Coast States; R. P. Domschke, New York and Brooklyn; Fred. A. Wood, Ohio and Western Pennsylvania; J. C. Carmack, Southern States; Hayes Young, Wisconsin and Minnesota; E. H. Lee, Iowa, Nebraska, Kansas and Missouri; J. C. Meseroll, Indiana; W. R. McMillan, Michigan. All but the last named handle the perfumes exclusively, but Mr. McMillan carries a line of sundries besides.

## How a Druggist Should Advertise.

Druggists throughout the country have at last found out that advertising their goods does much toward selling them. Some of the more conservative pharmacists offer objections to newspaper advertising as unprofessional and others claim that they are unable to trace good results to this method of publicity.

No valid objection can, however, be made to the method which has originated in the fertile mind of F. H. Smith, one of the most successful business men in East Orange, N. J. Mr. Smith is the printer and engraver who has the undis-

puted reputation of doing the finest and most artistic work in the fashionable Oranges. He issues an attractive little monthly publication, which he sells to but one pharmacist in a town or a section of a city, giving information of interest to the patrons of drug stores, and intended for free distribution by the druggist. Each proprietor who adopts this means of advertising is allowed some space in the paper, in which he can insert whatever matter he desires.

This system of advertising has already met with marked success in other branches of business, and the druggists who have already taken it up have found it highly profitable.

Those desiring additional information can obtain full particulars and a sample of the paper by addressing F. H. Smith & Co. East Orange, N. J.

## A Handsome Container.

J. M. Maris & Co. of Philadelphia have gotten out a screw top vaseline bottle which is one of the neatest things that has ever been put on the market for selling petroleum jelly in. We illustrate the new bottle herewith, and Maris & Co. will be pleased to quote prices to any of our readers whose trade appreciates an elegant package.



## Cucumber and Elder Flower Cream.

In this preparation are combined the juice of cucumbers, the extract of elder flowers, and milk made from almond nuts.

In appearance it resembles cream from milk, and is neither greasy nor clammy. It has marvelous power to soften, whiten, cleanse and purify the skin. It cleanses the pores of the clogging sebaceous matter, thus keeping away blackheads and other blemishes. It is healing, soothing and cooling to the skin.

These goods, as well as all of Mrs. Gervaise Graham's preparations, are delivered to druggists free of all freight charges, no matter how small the order. Have you asked for copies of "Beauty," a journal devoted to the cultivation of physical beauty. Copies for free distribution will be mailed on application to Mrs. Graham, 1424 Michigan avenue, Chicago.



## Their Busy Season.

January, as a rule, is a quiet month in most lines of trade. The Morford Cash Register Company, Chicago, take an exception to this rule and claim that they have shipped more machines than in any one month of 1895. They say that all registers sold last year have been doing missionary work for them, and they consider each machine that goes out is a silent salesman for their business.

Perhaps their liberal trade journal advertising and the establishing of numerous agencies throughout the country has

something to do with their increased trade. They have found that they have a register that is exactly what the majority of druggists need, and if you are not already using one write for fully descriptive circular with prices, mentioning that you are a subscriber to THE AMERICAN DRUGGIST.

### No Damaged Mail.

For sending valued printed matter through the mails with a certainty of its being delivered in good condition there is nothing to equal Lavette's Patent Mailing Envelope. By its use photographs are sent with letters inside and go among first-class mail matter, and therefore are not liable to be crushed or damaged. The price is such that they are within the reach of all, selling at two for a nickel. Samples and particulars of sizes will be sent on request by the patentee and manufacturer, H. C. Lavette, 208 Randolph street, Chicago.

### Homœopathic Vials.

The manufacture of Homœopathic Vials is a branch of glass manufacture which has been kept almost entirely separate from the manufacture of a general line of bottles, and there are only a very few actual manufacturers in the United States. Homœopathic Vials are all made from tubes, and the drawing of these tubes is a great art requiring the highest skill and the most perfect material for the production of satisfactory results. This can readily be understood, that these tubes of glass are drawn out in 100 yard lengths! Among the largest, if not the largest, manufacturers of this line of goods are the Standard Flint Glass Works of Philadelphia, who should be consulted by any of our readers needing anything in the way of Homœopathic Vials before purchasing.

### Big Profits for the Retailer.

One of the best brands of Cubeb Cigarettes put on the market are those specially prepared by Frederick Hill, Mount Morris Bank Building, 125th street and Park avenue, New York. They are sold at a rate that will command the attention of retail druggists and they are claimed to be a sure remedy for asthma, bronchitis, diseases of the throat, etc. While winter weather prevails a big sale of this class of goods may be looked for.

The cigarettes are put up in attractive boxes, and are carefully wrapped in tin-foil. They are neat in appearance and cannot help being rapid sellers. Send for sample box and special prices, mentioning the AMERICAN DRUGGIST.

### A Tonic in the Winter

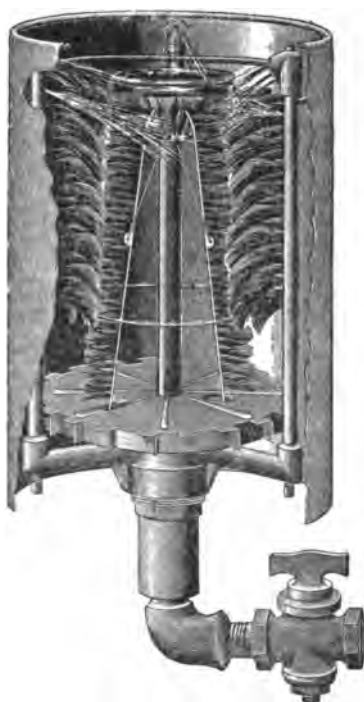
As a winter tonic Vin Mariani is meeting with an unusually large sale, which proves that the public are beginning to recognize its merits. The Ideal French Tonic Wine is especially valuable to those who have suffered from the grip, influenza, or any malady, in destroying the poison in the blood, as it quickly removes all accumulated poisons from the system, improves the circulation, enriches the blood and strengthens the stomach and bowels, as well as all the other vital organs of the body. No medicine could be more agreeable to the taste and at the same time so beneficial.

### They Always Stick.

The special advantages of the Sure Catch Poison and Sticky Fly Papers made by the J. Hungerford Smith Company of Rochester, N. Y., are being appreciated by retail druggists all over the country for the very simple reason that the goods are sold readily because of those advantages. The new sticky composition used is a soft, heavy coating of highly viscous material that will stand exposure two or three times longer than heretofore, and being soft and viscous, will catch flies perfectly in cool weather as well as hot.

### Clean Tumblers.

All authorities on soda water agree that a primary requisite to success at the soda counter is clean tumblers, and clean tumblers cannot be had without using the best and most practical apparatus



for cleaning them. We illustrate herewith a revolving brush tumbler washer which has in it many points of excellence, and which the manufacturers claim to be the only successful revolving brush tumbler washer on the market. One of the best evidences of the practical value of the washers is the number of testimonials which the manufacturers, Frost & Mercer of Grand Rapids, Mich., have received from persons who have used it. If you will send them a postal card they would like to send you some of these testimonials together with some interesting facts on the subject of tumbler washers.

### The Essential Oil Market.

The February price-list of McKenzie Bros. & Hill contains several items of unusual interest. Their review of the essential oil market for the month reads as follows:

During the month of January the essential oil market has been generally dull, with the exception of oils citronella, sassafras (natural and artificial), anise and cassia.

The first named has again advanced and is held in strong hands. Notwith-

standing the advance in price during the past year, statistics show an increase in total export from Ceylon of 118,276 pounds over the previous year, and an increase of 418,684 pounds over the year 1893. We look with interest to the future of this oil, and think the advance largely speculative.

Many users of citronella are now substituting artificial sassafras. The price has advanced materially owing to unusual demand, the increase in price of raw material and scarcity of same. The future of this oil is toward higher prices.

Anise is very scarce and will go higher. Cassia is kept steady by the offering of low grade and adulterated oils.

Any of our readers who have not received this price-list should write for copy to McKenzie Bros. & Hill, 53 Water street, New York.

### Review of the Wholesale Market.

NEW YORK, February 8, 1896.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

Trade in the several departments of Drugs, Dyestuffs and Chemicals fell off a little during the month of January, but as January is usually a dull month the lessened volume of business is never regarded as significant of trade depression. February opens with a better tone and dealers everywhere speak confidently of the prospects of a return to the old conditions of activity. The uncertainty which prevailed regarding the disposition of the new Government bonds caused an uneasy feeling among merchants generally, but now that confidence has been restored a revival of speculative interest will naturally ensue and tend to materially increase the volume of business during the year. The movement of stock has increased to some extent during the past few days, the bulk of business coming from the West and South, with a fair representation from other sections of the country. Prices are firm as a rule and where changes in value have occurred the majority have been in favor of holders.

#### ADVANCED.

Acetanilid,  
Cream tartar,  
Oil wormseed,  
Rochelle salt,  
Seidlitz mixture,  
Oil sassafras,  
Sassafras bark,  
Opium,  
Oil citronella,  
Oil lemon,  
Oil sweet orange,  
Oil pennyroyal,  
Celery seed,  
Sabadilla seed,  
Insect flowers.

#### DECLINED.

Oil cubeb,  
Caffeine,  
Colocynth apple,  
Arsenic, white,  
Cubeb berries,  
Lycopodium,  
Oil peppermint,  
Cod liver oil,  
Balsam tolu.

#### DRUGS.

Acetanilid has advanced in sympathy with the crude material and is now quoted 28c. to 30c.

Alcohol continues in active demand and held firmly at the previous range of \$22 to \$25 for grain and 90c. to \$1.20 for wood and alcoholene, respectively. Contrary to expectations there is no immediate prospect of a change in price.

Atropine has hardened a trifle in the interval owing to the advance in Bella-



donna, and though values are as last quoted, an early advance is anticipated.

*Balsams* have not varied materially in the interval either as regards price or demand. The single exception is *Tolu*, which is quoted a fraction less, say at 47c. to 48c. *Tolu* is steady at \$2.30. *Oregon Fir* is held and selling fairly within the range of 60c. to 65c. and 70c. to 75c. for barrels and cases, respectively. *Canada Fir* has sold fairly at the quoted range of \$2.15 while *Copaiba* is inactive at 32c. to 35c.

*Barks* are without new features of interest save *Cascara*, which is a fraction higher and quoted steady at the advance; quoted 3¼c. to 4¼c. *Sassafras* is maintained with some show of firmness at the recent advance to 7c. to 10c. *Elm* is yet quoted 10c. to 11c., and *Soap*, 3¼c. to 3½c.

*Buchu Leaves* are meeting with a fair jobbing inquiry and prices are well sustained in the face of a slight scarcity of good grades. Numerous small sales of both short and long are reported at 12c. to 15c. and 20c. to 22c.

*Cacao Butter* is held less firmly and we hear of sales at 81½c. to 82½c., according to quantity. The auction sales in the London market marked a lower range, Cadbury's realizing 8¼d.

*Caffeine* continues weak in price under more or less sharp competition. For lots of 5 pounds \$6 is now a common quotation, and that price was said to have been accepted in some quarters for smaller quantities, though \$6.25 to \$6.50 is generally asked.

*Cassia Buds* are developing a firmer tendency, though no quotable change in price is yet reported; 18c. is quoted steady.

*Coca Leaves* are in fair demand and firm as to price, but selling in moderate quantities only. Prices remain at about 27½c. to 30c. for Huanuco and 20c. to 22c. for Truxillo.

*Cubeb Berries* are still offered at 10c. for XX stemless and 7c. to 9c. for other varieties, with only a moderate business reported.

*Colocynth Apple* is still weak and unsettled, with only a limited demand experienced. Purchases of Trieste can be made at 58c. to 60c. and Spanish at 30c. to 32c.

*Cod Liver Oil* has receded a notch or two. Norwegian in barrels may be secured at \$47 to \$48, though higher prices are asked for prime grades. Offerings are light and indifferent.

*Insect Flowers* are very firm in the foreign market and stock here is held stiffly from 14½c. to 15c. upward, according to quality.

*Insect Powder* has developed no new feature of consequence, either as regards price or demand, though the position of the flowers leads some in the trade to anticipate an early rise.

*Lycopodium* prices remain at about 47c. for Politz and 44c. to 45c. for other brands, with numerous small sales reported at these figures.

*Morphine* continues in moderate demand for consumptive purposes at the previous range of say from \$1.45 to \$1.60 for bulk.

*Opium* has moved out with more freedom during the past few days and values have stiffened a trifle in consequence, with prominent holders asking a slight advance in some instances from the

quoted range. Advices from the primary markets are more or less strong, and state that holders in Smyrna are asking 7s. 10d. and that Chinese buyers were directly or indirectly bidding 7s. 7d. for ordinary druggists' quality there and 8s. in London. The fact was emphasized also that the stock here and due to arrive in the near future is under remarkably close control. In this market \$2 to \$2.05 will still buy broken packages, while cases are quoted \$1.95 to \$2. Powdered opium remains at \$2.55 to \$2.65 for ordinary and \$3 to \$3.10 for high tests.

*Quinine* is without change as regards price and reports generally point to moderate sales and a lack of inquiry. Agents still quote 80c. for P. & W. and 28c. for other brands in large cases. Outside lots of foreign are quoted at 26c. to 27c. in bulk.

*Saffron*, American, steady in price and likely to advance; 40c. is now quoted for small quantities. Valencia Saffron offers at slightly lower prices, or say \$6.50 for high grade goods, others, however, quote \$7.25. Alicante offers generally at \$4.75 to \$5.

*Tonka Beans*, Angostura, are in fair demand, with sales at \$2.50 in original packages.

*Vanilla Beans* are firmly maintained at our quotations.

#### DYESTUFFS.

*Cutch* continues steady in price and in fair demand; sales of bags at 5c.

*Divi Divi* is easier at \$40 to \$42, with a lack of important inquiry.

*Gambier* is firmer, with spot lots selling at 4c. to 4½c.

*Nut Galls* remain very firm at 13c. to 15½c. for Blue Aleppo in sympathy with high cost in the foreign market.

*Sumac*, Sicily, is in better supply and easier. We hear of sales of moderate quantities, \$47.50 to \$48, and those figures would doubtless be shaded for round blocks.

#### CHEMICALS.

*Acetate of lime* has receded from the firm position taken last week and sales of brown are making at 80c. to 85c. and gray at \$1.80 to \$1.85c.

*Arsenic*, white, is a shade easier, with English selling in moderate quantities at 5¼c.; German at 5¼c spot and Belgian to arrive at 5c.

*Blue Vitriol* continues weak and unsettled, with prices quoted all the way from 3¼c. down to 3½c., as to size of lot.

*Borax* is weak and irregular, with California refined selling in small lots at 6c., ¼c. less being accepted for larger parcels.

*Chlorate Potash* still varies somewhat in price and fair sized lots can be secured at about 9¼c., though 9½c. is generally quoted.

*Carbonate Potash*, which offers at present at about 4¾c. to 5½c., according to quantity and quality, is likely to be advanced 25 per cent. by a recent Custom House decision which makes the article dutiable at 25 per cent. instead of free, as the law has hitherto been construed.

*Cream Tartar* from second hands at less than 26½c. has been about all taken up and only a limited quantity can now be obtained at the price. Manufacturers' prices remain at 27c. for crystal and 27c. to 27½c. for powdered.

*Nitrate of Soda* is high for future shipments, but round lots on spot can still be purchased at about 1.70c.

*Rochelle Salt* has advanced another 1c. and manufacturers are now quoting from 21c. to 21½c. for bulk, according to size of lot.

*Seidlitz Mixture* has also undergone a fresh advance of 1c.; manufacturers now quote 17½c. to 18c. for bulk, according to quantity.

#### ESSENTIAL OILS.

*Anise* continues to sell quite freely in small quantities and the market appears well sustained at \$2.60.

*Cubeb* is a fraction lower and dull, with 90c. quoted by some holders.

*Cassia* is held less firmly owing to recent arrivals, but prices are as previously quoted.

*Messina essences* are firmer in sympathy with higher cables from the primary market, but fairly good stock here and rather sluggish demand prevent full realization of prices on a level with present import costs. Sanderson's lemon is now quoted at \$1.30 for 1895 crop, and \$1.35 for 1896 crop; orange at \$2.12½ for Sanderson's and \$1.72½ for Marsalla.

*Wormseed* has hardened a trifle due to light supplies and \$1.65 is now the inside figure for small quantities with up to \$1.75 asked.

#### GUMS.

*Arabic* continues very firm in the foreign market and prices here show a rising tendency, though no quotable change is yet reported.

*Camphor* remains at 59c. for city refined in barrels, and 60c. in cases, and 58c. to 59c. for Japanese in cases. Demand is light and offerings are still extremely reserved.

*Chicle* is held firmly at 37c. upward with a rising tendency in view of recent small arrivals.

*Shellac* has met with fair inquiry for consumption and prices are steadier, with T. N. selling at 22c. to 23c., D. C. at 81c. to 82c., Garnet at 28c. and Diamond I. and V. S. O. at 28c.

#### ROOTS.

*Ipecac* has sold at a slight advance in the London market, but prices here are as previously quoted, say \$1.80 to \$1.40.

*Orris* is in better supply, but prices are unchanged.

*Sarsaparilla*, Mexican, is in better supply and values are slightly easier, with 5¼c. to 5½c. now quoted.

Nothing new transpired in any of the other roots, business as a whole being flat.

#### SEEDS.

*Anise*, Italian, has been in demand of late, though prices are notably unchanged. The range of 6¼c. to 6½c. is yet quoted in most instances.

*Celery* is maintained with some show of firmness at 12½c. to 13c., but important demand is yet lacking.

*Coriander* does not offer under 4¼c. for natural or 4½c. for bleached magalore, but the market is still devoid of activity.

*Hemp*, Russian, is a trifle irregular with, however, 2¾c. to 2½c. generally quoted.

*Rape*, German, while not higher in price is much firmer and selling now at 2¼c. to 2½c., as to quantities.

*Mustard*, California yellow, is in better supply, though prices remain at the previous range of, say, 2¼c. to 2½c. Brown is steady from 2¾c. to 3¼c.



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## LEADING ARTICLES.

Urine analysis for pharmacists furnishes the subject for an interesting address, by Professor Bartly (page 115).

The position of the naval and military apothecaries of Holland, is given (page 117), in continuation of the series begun last October.

The meetings of the American Chemical Society, of the Society of Chemical Industry (page 119), and of the Philadelphia College of Pharmacy, furnishes several notes of interest. Mr. Gilpin's formula for "Bitterless Cascara Sagrada" (page 119), is particularly valuable.

The valuable paper by Prof. Dragendorff on the detection of the newer medicaments is concluded on pages 120 and 121.

As ingenious arrangement of apparatus for continuous repercolation is illustrated on page 122.

The literature of the qualitative examination of acetanilid is condensed and presented most acceptably on page 122. An excellent article by Lyman F. Kebler (page 124), treats of recent methods of cinchona assay.

A most profound and scholarly disquisition on the use of drugs, from the pen of Dr. W. R. Gowers, appears on page 125.

## "WAR ON MUSLIN DRUGGISTS."

FROM the president of the State Pharmaceutical Examining Board of Pennsylvania we are in receipt of a communication touching upon the enforcement of pharmacy laws by pharmacy boards, in which he intimates that our war on muslin druggists has struck a popular chord among the druggists of Pennsylvania. Mr. EMANUEL says that druggists all over the State have written to the board as a result of the appearance in our last issue of the editorial article headed "Enforcing the Pharmacy Laws."

That affairs pharmaceutical in Pennsylvania are in a better condition than in Kings County, N. Y., is made evident by a report from the pharmacy board showing that in a canvass of 185 stores only eight out of the number were found selling poisons in contravention of the pharmacy act

## MEETS WITH POPULAR APPROVAL.

It is gratifying to observe the support which is being accorded by the public generally to the officers of the different boards of pharmacy throughout the country, in their efforts to regulate the sale of drugs and medicines. There was a time when any action looking to the prosecution of illegal sellers of poisons would bring popular odium upon the parties concerned in it; but public sentiment has undergone a change within a recent period, and it is now no longer the rule to find complaints of class legislation, etc., whenever new amendments to existing pharmacy laws are proposed.

## A NEW WAY TO SUPPRESS CUTTING.

It has always seemed to us that the various local pharmaceutical societies and organizations might have met with a fuller measure of success in their efforts to regulate the prices and sales of patent medicines if they had approached the subject from a different standpoint. Vermin destroyers are not the only form of proprietary preparations which are used as a means of self-destruction, or

which cause death through accidental poisoning. There are many proprietary medicines on the market to-day which contain varying amounts of scheduled poisons. Why should not the local branches of the Interstate Retail Druggists' League co-operate with the State pharmacy boards, and investigate the sale of poisons by unregistered persons? Agents might be employed to purchase supplies of suspected nostrums and have them carefully analyzed to determine their poison content, and then, if it is found that the preparations purchased contain even traces only of some deadly poisonous drug in each dose, but which taken in bulk would cause death, let the proper officers bring the matter to the attention of the courts and institute proceedings against the dry goods man or grocer who sold the poison.

Action of the same kind could be carried out in cases where pharmacists carry their ideas of business competition so far as to sell articles below actual cost. Where adulteration or sophistication is suspected, why cannot an officer of the pharmacy board, or some one detailed from the local association, make purchases at the cutter's store, and if it is found on examination that the article sold is below the standard requirements of strength or purity, prosecute the dealer for contravening the law?

**A LESSON IN THIS.** Action of this kind would constitute a useful lesson to the public, as it would be a means of directing attention to the fact that buyers do not always effect a saving by making purchases at such stores, but are usually cheated with cheap drugs of inferior quality.

## THE ENGLISH WAY.

The idea is by no means a new one, since the Pharmaceutical Society of Great Britain has worked along the lines indicated with unvarying success for several years past, and it is fairly well known in England to-day that no grocer or department store keeper dare sell certain proprietary articles which had hitherto been freely sold by them.

The latest case in which the Society has been successful was that of a grocer

who was charged with selling such a common article of commerce as fly papers. Dr. PAUL, the editor of the *Journal of the Society*, made several purchases of the paper, and finding it to contain large quantities of arsenic, which could be easily extracted by simple immersion of the sheets in water, a prosecution was instituted, and the result has been that the lower courts have decided that poisonous fly papers can only be sold by persons registered as chemists and druggists.

There is no reason why similar cases could not be prosecuted and brought to trial in this country.

### THE INCREASE IN PRICE ON PROPRIETARIES.

THE retail druggists of this country have very generally criticised the action of several proprietors who have advanced the list prices on their goods. The advance made on Paine's Celery Compound in particular seems to have met with most severe criticism. Many druggists hold that the advance in the price of 75 cents per dozen will fall wholly upon the retailer, who will be unable in any way to recoup himself. This argument holds good, however, only where full prices or very nearly full prices prevail, for where the selling price has been cut down to the list jobbing price the cutters will be compelled to advance their price in proportion to the advance of the manufacturers. Singularly enough, however, the most serious criticism of the advance seems to come from those quarters in which the price has been most deeply cut.

If, as has been alleged, the increase in the price is accompanied by the adoption of more stringent measures for the prevention of the sale of goods to cutters, either directly or indirectly, then the retailer will very gladly submit to it, for all that the retailer expects is to be placed on exactly the same footing as to price as the cutter. Ex-President MAIN and Ex-President ELIEL of the National Wholesale Druggists' Association agree in thinking that the ultimate result of the movement will be beneficial to the retailer, and the first named gentleman, in an interview with a representative of the *AMERICAN DRUGGIST*, stated that cutters were finding greatly increased difficulty in securing supplies even now.

One motive prompting the increase is indicated in the letter from Dr. R. V. PIERCE, which appears on another page. The only inference to be drawn from that letter is that the increase in price has been made in response to the demands for a wider margin for the jobbing trade. In one instance, however, that of Scott's Emulsion, this inference is not warranted, as the remarkable rise in the price of cod-liver oil is a sufficient

justification for the advance. In no other case, as far as we are aware, has any specific justification been set forth. If, then, the advance has been made in deference to the clamor of the jobbers for "protection" and a wider margin, the proprietors owe it to themselves to insist that the jobbers see to it that the cutters do not secure supplies. If Dr. PIERCE is correct in believing that the wider margin of rebate will simply offer greater inducements to the cutter, then indeed the retailers have a just cause of grievance to add to an already long list.

Jobbers and proprietors must discharge the responsibility assumed by them under the rebate plan if they wish to retain the good will of the retail trade, and any failure to do so after the granting of the increased margin by the proprietors will certainly work a most serious damage to whichever party is at fault.

### AFFAIRS IN OHIO.

THE latest movement of the Ohio Food and Dairy Commission seems to us to scarcely be in accord with that discretion which is so important a portion of the equipment of public officials. We have always argued that the enforcement of a pure food and drug law in conjunction with a pharmacy law was the greatest hope for legitimate pharmacy, and have held to this opinion despite adverse criticism. But a one-sided enforcement of any law is unjust, and for the commission to confine its attention almost exclusively to the drug trade, to the neglect of infractions of the law in other lines, works a hardship and an injustice. It may be that the State of Ohio has been wholly purged of offending grocers and dairymen, but the druggists suffering from the zealous attentions of the commissioner seemed inclined to doubt it. The defeat of the commissioner on one or two cases may also be taken as an indication that the severity of the steps being taken does not meet with the undivided support of the public, which is beginning to look upon the work as somewhat in the nature of persecution rather than prosecution.

### WHERE IS THE PHARMACY BOARD?

Any rigid enforcement of the adulteration law without an equally rigid enforcement of the pharmacy act operates as a one-sided enforcement so far as the pharmacist is concerned. If the pharmacist is to be held up to the letter of the law as regards the character of all the drugs sent out then the grocers and general merchants should be held up to the letter of the law as regards the sale of poisons and medicines. With all the activity evinced in different sections of the United States by the boards of pharmacy we have not heard anything from

the Ohio board aside from the discharge of routine duties. Has not the board authority or means to enforce the law, or is it possible that there are no offenders in Ohio? While this has no direct bearing on the acts of the food commissioner it has some relation to the subject, for if a few dozen offending grocers and department stores were hauled up by the Pharmacy Board with as much blare of trumpets and beat of drums as accompany the apprehension of a druggist for selling phosphoric acid above the pharmacopoeial strength the effect on the public would be most salutary as directing attention to the fact that the druggists are not the only sinners.

We still believe that pharmacy will be the gainer in the end by the present agitation, but we do not approve of the extreme measures resorted to by the commissioner and feel confident that the next election will show that the majority of the people of Ohio condemn them.

### OF WRITTEN RECOMMENDATIONS.

HOW much weight should attach to written recommendations of clerks it is difficult to determine, but in the opinion of a large number of employers they are entitled to but very slight consideration.

It by no means follows that all written testimonials presented by applicants are untrue, or even that a majority are, but it does mean that a sufficient number of them are written with a "mental reservation" on the part of the writer to seriously impair the value of all written recommendations.

When asked for a written recommendation an employer can scarcely decline to furnish one of some sort unless the employee has been either notably incompetent or downright dishonest. The letter of recommendation may be literally true and still be misleading. A prominent down town druggist recently had occasion to investigate the record of an employee who had come to him with good written recommendations, and found that the writer of one of the recommendations had the gravest doubts both as to the honesty and sobriety of the clerk, but as he had no positive proof of dishonesty he had not felt justified in refusing the requested recommendation. This discovery but confirmed the druggist in a resolution formed long since never to place much reliance on unsupported written testimonials.

### The Best of American.

I consider the *AMERICAN DRUGGIST* and *PHARMACEUTICAL RECORD* the best of all of the American journals issued.

EDW. PLUMMER.

Bartlett & Plummer, Druggists.  
NEW YORK—405 FIFTH AVENUE AND 1900  
BROADWAY, January 23, 1896.

## The Examination of Urine by Pharmacists.

**Physical Characteristics of Normal Urine—Color, and Its Significance—Transparency and Turbidity—Quantity as an Index of the Physical Condition—Specific Gravity—Urea and Its Estimation—Abnormal Constituents Found in Urine—Albumin, Blood and Glucose, their Detection and Significance.**

At the last meeting of the Brooklyn College of Pharmacy, Professor Bartley, dean of the faculty, delivered an address on the subject of the examination of urine.

He prefaced his remarks by a statement that it was rather misleading to speak of his proposed address as having for its subject the examination of urine by pharmacists, because he did not propose to cover the entire field, but rather to direct attention to some of the more important physical characteristics of normal and abnormal urine, and to the deductions which might be drawn from an observation of them.

Pharmacists are frequently called upon to make some sort of an examination of urine, said Professor Bartley, and if some knowledge of urinary analysis were more general among the pharmacists he thought that they would be more frequently requested to make examinations than they now are. At all events, it was highly important that the pharmacist should have sufficient knowledge of the subject to prevent himself from being placed in the disagreeable position of being entirely ignorant when approached by a physician. The important physical characteristics of urine may be classed under the headings of color, odor, transparency, reaction, quantity, specific gravity, etc.

### COLOR.

Normal urine is of an amber color, the depth of the shade varying in proportion to the quantity of the fluid and the quantity of the normal coloring water. Where the normal quantity of coloring matter is secreted the depth of color, is of course inversely proportional to the quantity of urine voided in 24 hours—that is, the larger the quantity passed in 24 hours the higher the color, the deeper the color. Some knowledge of the quantity passed may be deduced from the color of the specimen. A very light color indicates either high dilution or a lessened excretion of the coloring matter, and this will be found in urine from diabetes patients, where the quantity is very large, in hysterical women, and in those forms of Bright's disease accompanied by an increased secretion of urine. Many specimens of urine grow darker in color on standing a few hours—never paler.

A red colored urine usually indicates blood, blood coloring matter, fever, or the action of certain medicines or foods. Magenta, crysophanic acid, or logwood may color the urine reddish, rhubarb or senna, brown; santolin, or picric acid, yellow; carbolic acid, tar, or arseniuretted hydrogen may impart a greenish black color; methylene blue may produce a grass green or blue color; resorcin, salol, antipyrin and a considerable number of the phenol derivatives recently introduced into medicine may cause the appearance of a violet red color due to their property of destroying the red blood cells, which destruction is followed by the elimination of the coloring matter by way of the urine. The speaker here took occasion to say that the medical profes-

sion was looking with less favor on these medicines. Rarely blue urine is observed due to the presences of chyle. The blue color is very seldom observed in fresh specimens.

### TRANSPARENCY.

Normal fresh urine should be transparent, or showing merely a faint translucent cloud of mucus and slightly acid in reaction. The acidity increases somewhat the first few hours after the urine has been passed, this change is generally termed the acid fermentation. During this period a sediment, more or less abundant, frequently separates. It is almost always, if red or pinkish, due either to uric acid or to the acid urate of sodium. If deep red, it is probably caused by blood. If white, either pus or earthy phosphates are indicated. This last sediment, however, can only appear in neutral or alkaline urines, and immediately dissolves on rendering the urine acid. On heating the urine with a portion of the sediment the acid urate dissolves, the phosphate is not affected, and in the case of pus the sediment becomes more pronounced from the precipitation of albumen, which is always present when pus is found. A weak alkali will dissolve the acid urates, but not the phosphate, and will convert the pus into a gelatinous mass resembling raw white of egg. Pus effervesces strongly with hydrogen dioxide, which will serve to distinguish it at once.

### REACTION.

The reaction of normal urine, as above stated, is usually slightly acid, this is ordinarily determined by dropping into the urine two small strips of litmus paper one red, and the other blue. A very convenient means of applying this test is presented in tablets of sugar of milk colored with litmus solution. These tablets are more easily handled and less likely to deteriorate than paper, and are, if properly made, extremely remittive.

On standing for a considerable time, varying with the temperature the composition of the urine and the exposure to air, the acidity gives way to an alkaline reaction caused by the conversion of the urea into ammonium carbonate under the influence of certain bacteria, chief among which is the micrococcus ureæ. This is termed the "alkaline fermentation" of urine, and it occasionally takes place in the bladder, especially in diseased conditions of this organ, or from

retention of the urine too long in the bladder, or from inability to entirely empty it. A urine that has become alkaline from fermentation can be distinguished from one made alkaline by the presence of fixed alkaline by the behavior of a slip of red litmus paper when dipped in the urine, and dried at a gentle heat. If the alkalinity is due to the presence of ammonium carbonate the carbonate is volatilized, and the litmus resumes its red color, but if fixed alkalies are present the blue color remains unchanged.

### ODOR.

The odor of normal urine has been described as aromatic. A putrid odor or an ammoniacal odor, or the odor of sulphuretted hydrogen, are occasionally met with, and are, of course, abnormal.

Certain medicinal substances, and some articles of food may impart their odor to urine. Turpentine, for instance, may impart the odor of violets, cubebs, valerian, copaiba, asparagus, garlic, etc., all sometimes impart a characteristic odor to urine.

### QUANTITY.

The quantity of urine passed in 24 hours is about 50 fluid ounces; varying 5 or 10 ounces within physiological limits. The quantity is increased by excessive drink, by increase in the amount of food taken, by disturbance of the circulation due to anxiety or emotion, hysteria, cold weather, and by certain medicines which increase the force of the heart-beat, and then raise the general blood pressure in the arteries. The quantity is decreased by abstention from drinking fluids from lack of exercise, or food, and sometimes from disturbances of the circulation due to emotion, etc.

In disease the urine is usually diabetes insipidus, diabetes mellitus, and in certain forms of Bright's disease. The quantity is decreased in all acute fevers and in diarrhoea, and in most chronic wasting diseases and in starvation. Suici, during his fast, passed as little as 8 ounces per day, while the normal quantity should, as previously stated, be about 50 ounces.

### SPECIFIC GRAVITY.

Specific gravity varies between 1,018 and 1,022, 1,020 may be regarded as normal. In disease the variation is from almost the specific gravity, as water to as high as 1,050. When the specific gravity is taken in conjunction with the quantity passed in 24 hours this will give us an important insight into what is going on in the body. It has been found that the last two figures of the specific gravity, when no abnormal solids are present, very nearly represent the number of grains of solid matter in one fluid ounce of the urine. If then, the specific gravity of 1,020 represents 20 grains of solid matter in each ounce of urine, and 50 ounces of such urine be passed in 24 hours, it will be seen that the normal amount of solid matter passed is about 1,000 grains for a man of the average size of 150 pounds, and great variation in these figures indicates some serious derangement either in the changes going on in the body, or in the power of the kidneys to eliminate the solids.

If, for example, the total solids should drop below 700 grains in 24 hours, it will show either that the kidneys are unable to eliminate them or that the solids are not produced. If the patient had been taking a fair amount of food the latter supposition may be considered as almost conclusively established, and in this case

a serious danger would be indicated, if the total solids drop to 500 grains or less in the above circumstances, the person is in danger of being poisoned by the retained solid waste products, and this would be almost conclusive evidence of Bright's disease, irrespective of whether any test for albumin had been made or not; if, on the other hand, the solids thus computed are much above 1,000 grains in the 24 hours, it would indicate some destructive process as going on in the organism, such as tuberculosis, or a wasting fever, or the elimination of some abnormal substance, such as glucose, pus, etc. If the solids were very much above normal we could almost certainly predict that sugar would be found in the urine. This is an exceedingly important point.

#### UREA AND ITS ESTIMATION.

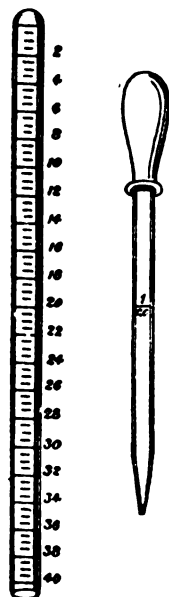
About one-half of the solids excreted, or about 500 ounces in 24 hours, are organic. While the above methods of computing the solids is approximately cor-

soda solution is then added to the fifteenth or twentieth division. The tube is now inclined, and pure water poured carefully down the side of the tube, and floated upon the top of the fluids already in. One ccm. of urine is then added, in the same inclined position, so that it will not mix with the reagents below, but remain in the water at the surface of the fluid. The open end of the tube is now quickly closed with the thumb, and the top firmly grasped in the right hand. The tube is now inverted, and the con-



SQUIBB'S UREOMETER.

FIG. 62.



BARTLEY'S UREOMETER.

rect, it cannot be regarded as reliable as would be a quantitative estimation by chemical means. Since the quantity of urea excreted is generally regarded as an index of the tissue changes going on in the body the quantity eliminated is important, and methods have been perfected by means of which any one can easily make an estimate of the urea at but slight expense of time or money.

The lecturer here called attention to Squibb's process for estimating urea, and exhibited Squibb's apparatus. He also showed his own ureometer, which had the advantage to the practical man that the scale gives direct readings, showing the number of grains of urea in one ounce, when 1 ccm. of urine is used for the estimation. The apparatus consists of a graduated tube closed at one end, and of a pipette with a mark, showing the point to which it must be filled to contain 1 ccm.

#### BARTLEY'S UREOMETER.

The tube is utilized as follows:

A 25 per cent. solution of K Br is added to the fifth division. The chlorinated

tents well mixed. A rapid decomposition takes place, which is usually ended in from 3 to 5 minutes. During this time the liquid is kept agitated without violent shaking. As soon as the effervescence has ceased, the reading is taken at the surface of the fluid, with the tube still held in the inverted position. It is now opened under water, when the column of fluid in the tube will fall, and the reading is taken again. It is best to have a wide, deep jar for the water, so that the tube may be depressed to bring the surface of the liquid in the tube to the surface of the water in the jar; but an ordinary bowl may be used, as the error caused by the difference of three or four inches of water is very slight. The difference in the two readings gives the number of grains of urea in a fluid ounce of urine. This quantity, multiplied by the number of fluid ounces passed in 24 hours, should be not far from 500 grains. A less quantity than 350 grains in an adult, who is eating the usual amount, should be regarded as pathological, and suspicious of nephritis, or of deficient kidney excretion.

Squibb's urea apparatus is a very simple apparatus, as stated by the lecturer, and can be easily improvised in a drug store. It consists of two wide-mouthed bottles, the larger of which (C), capable of holding about 250 ccm., is fitted with a rubber stopper, through which is passed a curved delivery tube and a short straight tube, the latter connected by a piece of rubber tubing to the short glass tube in the rubber stopper of the smaller bottle or generating-bottle (B). In the generating-bottle is a small test tube (A).

Into the test tube C is placed 5 ccm. of urine, and into the smaller bottle B is put 20 ccm. of the hypobromite solution, or strong liquor sodate chlorinate. The test tube is then placed in the generating bottle B, care being observed that the urine and the reagent do not come in contact. The larger bottle A is now filled with water, and the two bottles connected by the rubber tube, the larger bottle being placed on its side upon a block, and when all connections are tight, the generating-bottle is shaken so that the urine will mix with the reagent.

Decomposition takes place, and the generated gas passes into the bottle C, displacing water, which is caught in a graduated cylinder, or other measuring

vessel. The volume of water displaced is equivalent to the volume of gas evolved.

Each ccm. of nitrogen gas evolved at 0 degree C., and normal pressure represents 0.0097 gm. of urea. Then by multiplying the number of ccm. evolved by this number the quantity of urea in the 5 ccm. of urine taken is ascertained.

The volume of gas obtained, when the operation is conducted at ordinary temperatures, should always be reduced to its corresponding volume at 0 degree C. and 760 mm.

#### Abnormal Constituents Found in Urine.

Pathological urine frequently contains abnormal constituents which furnish a valuable clue to the condition of the patient. The most of important of these are albumin, globulin, glucose, bile coloring matters, and acids, blood, blood-coloring matters, pus, chyle, and abnormal sediments. The speaker said that the delicacy of some of the older tests left much to be desired, and that several of them had been virtually superseded by improved methods in the work of careful analysts.

#### TO TEST FOR THE PRESENCE OF ALBUMIN.

The following test was recommended for the detection of albumin. Acidulate the urine with acetic acid, filter if mucin be thrown down, and then add a few cc. of a solution of potassium ferrocyanide, or float the acidulated urine on the surface of the ferrocyanide solution. If albumin be present a white precipitate will appear. Neither peptone, mucin, nor alkaloids are thrown down by this test.

#### TO DETECT THE PRESENCE OF BLOOD.

Blood may be detected chemically by mixing a small portion of the urine in a test tube with an equal volume of a mixture of freshly prepared tincture of guaiac with turpentine, which has been exposed to the air for some time. If blood-coloring matter be present a blue color will appear the depth, color, and the rapidity of its development. Pus also reacts to this test. Saliva and salts of iodine also do so, but only after a considerable lapse of time.

#### GLUCOSE.

The lecturer referred again to the fact that the specific gravity was a clue to the presence of sugar, the excretion of large quantities of light-colored urine of high specific gravity, indicating the probable existence of diabetes mellitus. The bismuth test was commended in preference to Fehling's, the test being applied in the following modified form: A solution is made of bismuth subnitrate, 2 gms.; Rochelle salt, 4 gms.; sodium hydroxide, 8 gms., and distilled water, 100 ccm. The urine is heated to boiling, and a few drops of this alkaline solution of bismuth is added, and on continuing the boiling after the last addition the mixture will turn black, if glucose be present. Before applying this test the albumin should be removed as if present albumin itself will grow black, precipitate with the bismuth solution.

#### From a New Subscriber.

I consider your journal one of the best; just keep it up to the present standard and I will always be a subscriber.

GEO. E. PIERSON.

HOPEWELL, N. J., January 15, 1896.

## PHARMACISTS IN THE ARMIES AND NAVIES OF THE LEADING EUROPEAN STATES.\*

### X.

#### Holland.

"In Holland and in the Dutch colonies the troops, including the officers, generally receive their medicines from the military pharmacies in the garrison hospitals. If troops or officers on duty are at a place which has no military pharmacy, the medicines are procured from a civilian pharmacy. If troops are accompanied outside of their garrison by a surgeon, he administers the simple kinds of medicines out of a medicine chest which is taken along.

The medical pharmacies in Holland obtain their stock of drugs, chemicals and pharmaceutical preparations from the "Imperial Medical Central Station" in Amsterdam.

#### IN THE DUTCH EAST INDIAN COLONIES.

In the Dutch colonies in the East Indies only the very small garrisons are without surgeons and military pharmacies. In such cases the commander of the garrison has the necessary medicines at his disposal. The military pharmacies in the Dutch East Indies, on the other hand, also furnish civilians medicines on payment.

The medical pharmacies of the Dutch East Indian colonies receive their stock from the "Imperial Medical Central Station at Batavia."

The military pharmaceutical service, both in Holland and in its colonies, is performed in all important hospitals by military pharmacists. In the small hospitals the surgeon, assisted by hospital stewards, gives the simple medicines.

#### ALL MILITARY PHARMACISTS COMMISSIONED OFFICERS.

The military pharmacists in Holland and in the Dutch colonies without exception rank as officers and belong to the body of sanitary officers, which consists of surgeons, military pharmacists and military veterinary surgeons. All in all, the Dutch state has at its disposal with the army, the navy and the colonial troops 88 professional military pharmacists, comprised in the following classes:

#### PHARMACISTS IN THE LAND FORCES.

One directing pharmacist with the rank of a lieutenant-colonel, who is at the head of the Imperial Medical Central Station at Amsterdam; 18 pharmacists of the first class, three of whom have the rank of a major, the others that of a captain; ten pharmacists of the second class, with the rank of a first lieutenant. The pharmacists of the second class are promoted to the first class after ten years if there is a vacancy.

Thirty hospital stewards are also employed in the army.

#### THE NAVAL SERVICE.

Three pharmacists are employed in the

navy—namely, one pharmacist of the first class with the rank of a captain, two pharmacists of the second class with the rank of a first lieutenant.

#### PHARMACISTS IN THE COLONIAL SERVICE.

The following pharmacists are on duty with the colonial troops in the Dutch East Indies: One directing pharmacist of the first class, with the rank of a lieutenant-colonel; one directing pharmacist of the second class, with the rank of a major; 15 pharmacists of the first class, with the rank of a captain; 81 pharmacists of the second class, with the rank of a first lieutenant.

Three pharmacists are employed in the West Indies—namely, two pharmacists of the first class, with the rank of a captain, in Surinam, and one pharmacist of the second class, with the rank of a first lieutenant, in Curacao.

#### PAY OF THE COLONIAL PHARMACISTS.

Since pharmacists of other nationality than Dutch can be and formerly were employed in Dutch East India, it may be interesting to learn the annual salaries of military pharmacists in Dutch East India. They are as follows: Directing pharmacist of the first class, 9,000 guilders, or about \$8,600; directing pharmacist of the second class, 7,800 guilders, or about \$8,120; pharmacists of the first class, 4,800 guilders, or about \$1,920; pharmacists of the second class, 2,700 guilders, or about \$1,080. To this is added a free dwelling or a compensation for such, which ranges between 500 and 2,000 guilders (\$200 to \$800), according to rank and the garrison at which the pharmacist happens to be stationed.

All Dutch military pharmacists enter service at once as first lieutenants, in consideration of the time spent in preparation for their duties.

The Major-General Inspector of the Medical Service of the Land Forces is at the head of the entire Dutch military sanitary system, and therefore also the highest authority of the military pharmacists. He is advised in technical matters by a pharmacist of the first class.

#### THE CENTRAL MEDICAL STATION AT AMSTERDAM.

Five pharmacists are employed in the Imperial Medical Central Station in Amsterdam—viz., one chief and four pharmacists of the first class.

The chief is the director of the Imperial Medical Central Station and is directly subordinate to the inspector. The four pharmacists of the first class are subordinated to the chief and are divided among the departments as follows: One is employed in the department of medicines and for making pharmaceutical preparations, one is employed in the hygienic-chemical laboratory and two are attached to the department of administration.

The remaining 23 pharmacists of the army furnish the pharmaceutical service in the garrison hospitals. Their immediate superior is the chief surgeon of the hospital.

#### THE CENTRAL STATION IN THE INDIES.

In Dutch East India the following pharmacists are employed in the Imperial Medical Central Station of Batavia: One directing pharmacist of the second class as chief, one pharmacist of the first class and one pharmacist of the second class.

In addition there is quite a large hygienic-chemical laboratory under the direction of a directing pharmacist of the first class, assisted by a pharmacist of the second class. The remaining 48

pharmacists are divided among the garrison hospitals. A surgeon with the rank of a colonel is at the head of military sanitary matters in Dutch East India.

#### THE NAVAL PHARMACISTS.

The three military pharmacists of the Dutch navy are employed in the harbor hospitals in Amsterdam, Hellevoetsluis and Willemsoord and they must perform the same duties that the military pharmacists perform in the garrison hospitals, besides fitting out the ships with stocks of medicine. They do not go on cruises. On shipboard the pharmaceutical duties are performed by the surgeons.

#### THE QUALIFICATIONS REQUIRED FOR THE SERVICE.

The military pharmacists of the navy and the army and those in the West Indies are not specially prepared for their duties. Ordinary pharmacists who have graduated and are well recommended, without further ceremony, receive appointments as pharmacists of the second class as soon as a vacancy occurs. As soon as they have entered the service they receive compensation for the expenses incurred by them while they were studying.

#### QUALIFICATIONS OF THE COLONIAL PHARMACISTS.

The pharmacists for the East Indies are prepared at Government expense in an institution in Utrecht, before they join the army. Civilian pharmacists are appointed to this service only when there is not a sufficient number of scholars to fill all places. Two scholars are taken into the institute every year. They there receive the same instruction and must pass the same examinations as civilian pharmacists. Till 1885 pharmacists who had not been able to meet all the requirements demanded in Holland were sometimes employed in the East Indies. They always remained pharmacists of the second class unless they passed an examination to prove that they had the required knowledge of chemistry, botany and other sciences.

#### EDUCATIONAL REQUIREMENTS IN HOLLAND.

In Holland only one class of pharmacists is recognized legally at present. Graduation from a college, a "citizen school," of a "progymnasium" (lower kind of college or high school), or passing a literary and mathematical examination, is required as a preliminary to entering the profession.

The preparation for the profession begins with two years' practical experience in a pharmacy, closing with an examination. Then follows study for three or four years at a university. During this time four examinations must be passed—viz., first, an examination in natural science; second, an examination in pharmacognosy; third, an examination in theoretical pharmacy, and fourth, an examination in practical pharmacy.

When the fourth examination has been passed, a pharmaceutical diploma giving an unqualified right to manage a pharmacy is granted.

Just as in Belgium and in Italy, the chief stress of the entire pharmaceutical education is also in Holland put upon study at a university. In the examination the candidate must prove his practical ability by the compounding of prescriptions and pharmaceutical preparations; as for the rest, apart from the required two years' experience in a pharmacy, it remains with each one to obtain his practical knowledge when and where he can.

\* Translated from the *Pharmaceutische Zeitung*, by Otto Hoffmann, A.B., under the direction of Dr. Geo. F. Payne, chairman of the Special Committee of the A. Ph. A. appointed at the Asheville meeting to work for the fuller recognition of pharmacists in the army and navy of the United States. The publication of the series was begun in this journal for September 10 and so far there have appeared descriptions of the position of the pharmacist in the German army (September 10), the German navy (September 25), the Austro-Hungarian service (October 10), the Italian service (October 25), the French service (November 25), the Russian service (December 10), the English service (December 25), the Swiss service (January 10) and the Belgian service (January 25).





**Diiodcarbazol** is a yellow crystalline substance which melts at 184 degrees C. It has been recommended as an anti-septic.

**Chloriodolipol** is a chlorine substitution product of phenol creosote and guaiacol, which has been recommended by Zambelletti of Milan for inhalation in chronic affection of the air passages.

**Iodophen** is a name which has been given to a preparation apparently identical with nosophen, which has already been described in these columns. It has been used with good results in lieu of iodoform.

**Chloralin** is a new disinfectant and antiseptic which has been recommended in gynecology in 2 to 8 per cent. solution, and as a gargle in  $\frac{1}{2}$  to 1 per cent. solution. It is a liquid containing mono and tri chlororphenols.

**Lentaniin** is an alkaloid obtained from the *Lentana brasiliensis* which forms a white, odorless and very bitter powder almost insoluble in water but soluble in alcohol. It has been recommended in doses of 1 dram as a very energetic anti-septic.

**Acokantherin** is a glucoside obtained from *Acokanthera Schimperii*. It forms colorless crystals difficultly soluble in water and alcohol in the cold but very soluble when heated, and melting at 186 degrees C. According to Fraser and Tillie the pharmacological action of this body is not materially different from that of strophanthin.

**To Remove the Odor of Iodoform.**—Konteschweller states (*Pharm. Centralh.*) that the odor of iodoform may be removed by washing in a solution of hexamethylenetetramin. This practically results in the formation of iodoformin, an odorless substance previously referred to in these columns.

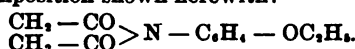
**Orphol** is a name given to a combination containing 26.5 per cent. of betanaphthol and 28.5 per cent. bismuth. It occurs as a gray powder; weak aromatic taste. It has been highly recommended in the diarrhoea of tuberculosis by Nencki, Schubenko, Blackstein, Chaumier and others. The dose for children is from 2 to 5 grains, and for grown persons 5 to 10 grains daily.

**Xylochloral** is a combination of xylose with chloral, and is analogous to chloralose which, as has already been stated in these columns, is made by heating chloral hydrate with grape sugar. Xylochloral is obtained by heating xylose with chloral in the presence of hydrochloric acid. By recrystallizing in hot water xylochloral is obtained in scales which

are easily soluble in water, and which melt at 182 degrees C.

**A New Reagent for Hydrogen Peroxide.**—A solution of anilin containing a little potassium bichromate was some time since recommended by Bach as a sensitive test for hydrogen peroxide. According to J. Von Jlosva, dimethylanilin, sulphanilic acid, ortho and para totuidin, xyloidin and naphthylamin all lend themselves to a similar use. The most sensitive is dimethylanilin, which is converted into methyl violet by solutions containing 1 part of hydrogen peroxide in 1,000. In more dilute solutions it is converted into a yellow coloring matter.

**Pyranthin** is a combination of paramidophnetol and succinic acid of the composition shown herewith:



Chemically, it is paraethoxyphenyl succinimid. According to Piutti it occurs in colorless, almost insoluble crystals which melt at 155 C. *Soluble Pyranthin* is a sodium salt of the succinate and is a white, very soluble powder. It has been recommended as an antipyretic. The dose is stated to be from 1 to 8 gm.

**Cacao Bougies.**—It not unfrequently happens that a physician orders bougies with cacao butter without specifying the quantity of butter to be used. In such cases the following will prove useful (*Oesterr. Zeitsch. f. Pharm.*): For a bougie 10 ccm. long and 2 mm. thick 0.8 gm. of cacao butter is necessary. With a thickness of 3 mm 0.7 gm. is required; with a thickness of 4 mm., 1.25 gm.; with 5 mm., 2 gm.; with 6 mm., 2.90 gm.; with 7 mm., 4 gm.; with 8 mm., 4.75 gm. With shorter bougies it is of course understood that a proportionately smaller amount of butter is required.

**A New Reagent for Bromine and Iodine.**—J. H. Kastle has found, in his investigations of halogen derivatives of sulphonamide, that the dichlor derivative of benzol sulphonamide, which is easily obtained by passing chlorine into a solution of benzol sulphonamid in 10 per cent. soda solution, is an excellent reagent for iodine and bromine. By adding it to the solution of an iodide or bromide in the presence of carbon disulphide the salts are decomposed and the iodine or bromine derivative of the amide is formed, which colors carbon disulphide or chloroform just as would iodine or bromine itself. This reaction is quite as delicate as that in which the halogen is detected by chlorine water, and it has the advantage that the reagent remains unchanged on standing.

**Ledum Camphor.**—Hjelt publishes in the current number of the *Berichte an*

account of the work carried on by himself, and, until his death, by Rizza. The figures of the analyses by both chemists agree with the formula  $\text{C}_{11}\text{H}_{18}\text{O}$ .

Calculated	C 81.44	H 11.71
Found (mean)	C 81.32	H 11.87

The boiling point method also confirmed this, the molecular weight being 222 and the mean found being 228. Ledum camphor is isomeric with patchouli and clove camphors, camphacol and other so-called sesquiterpene hydrates. Crystallized from alcohol, it forms long white needles, which have a peculiar odor. It melts at 104 degrees and boils at 288 degrees. It is fairly soluble in alcohol, in which solvent it is strongly dextrorotary  $[\alpha]_D = 7.98$ . It is a strong poison. By heating with acetic anhydride, a sesquiterpene,  $\text{C}_{15}\text{H}_{24}$ , appears to be formed, which has been termed ledene.

**Preservation of Thick Extracts.**—Schacherl (*Oesterr. Zeitsch. f. Pharm.*) recommends the process suggested by Dr. Schacht, which consists in putting a few drops of glycerin on the surface of the extract in the container. Four drops of glycerin will be sufficient to preserve a large quantity of extract from drying out at a temperature of 24 to 27 degrees. This author recommends the process of Kremel for the preservation of the dried extracts. He uses, however, gum arabic instead of the milk sugar recommended by Kremel. He adds the thick solution containing the required quantity of the gum arabic to the extract previously evaporated down to a comparatively thick consistence; evaporates on a water bath and, if necessary, adds sufficient powdered gum to bring the whole up to the required weight. The whole when thoroughly dry is finally powdered, and the author claims that when so prepared the extract keeps a long time unaltered and without becoming lumpy.

**New Derivatives of the Cinchona Alkaloids.**—When quinine or conquinene,  $\text{C}_6\text{H}_5(\text{OCH}_3)\text{N}(\text{C}_6\text{H}_5)_2(\text{OH})\text{N}$ , or cinchonine or cinchonidine,  $\text{C}_6\text{H}_5\text{N}(\text{C}_6\text{H}_5)_2(\text{OH})\text{N}$ , are heated with  $\text{PCl}_5$  in chloroform, the OH group in the alkaloids is easily replaced by Cl, and the resulting chloro-compounds yield up HCl to alcoholic potash, giving the well-known anhydro bases, quinine, conquinene, cinchene and cinchonidine, as they are sometimes most disadvantageously termed. It is now found that iron filings and sulphuric acid replaces the chlorine in the chloro-compounds by hydrogen, thus giving bases differing from the parent substance by one atom of oxygen—that is, in having had the hydroxyl replaced by hydrogen. Following the nomenclature of the benzoin derivatives, it is proposed to name the new bases as "desoxy" bases. Desoxy-cinchonine,  $\text{C}_{19}\text{H}_{21}\text{N}_3$ , is described as a crystalline body, melting at 90 to 92 degrees. It yields a platinum double salt, easily soluble in hot dilute HCl, and separating on cooling in reddish crystalline masses. It contains no water of crystallization. It corresponds to the formula  $\text{C}_{19}\text{H}_{21}\text{N}_3\text{H}_2\text{PtCl}_6$ . The base itself is easily soluble in the ordinary organic solvents. It is dextrorotary. Desoxy-conquinine,  $\text{C}_{19}\text{H}_{21}\text{N}_3\text{O}_2\text{H}_2\text{O}$ , is described as a crystalline compound, melting at 80 to 82 degrees. It yields a well defined crystalline hydrochloride. Very dilute solutions of the base in alcohol or tartaric acid show an intense, beautiful violet blue fluorescence. The alcoholic solution is strongly dextrorotary.

## AMERICAN CHEMICAL SOCIETY.

## THE CHEMISTRY OF CALYCANTHUS.

The regular monthly meeting of the New York Section of the American Chemical Society was held on Friday evening, February 7, in Professor Doremus' lecture room in the College of the City of New York.

Dr. Peter T. Austen, the chairman of the section, was unavoidably detained from the meeting, and his place was taken by Dr. McMurtrie. After the reading of the minutes of the previous meeting by Dr. Durand Woodman, Professor Hale announced that all members of standing committees had been re-elected by the council, that Dr. Dudley had been made president of the society, and that all other officers of the society had been re-elected.

## CALYCANTHINE, A NEW ALKALOID.

Dr. R. G. Eccles read a most interesting and carefully prepared paper on "New Facts About Calycanthus." He told how this plant was considered as poisonous in Tennessee, where it is found, and gave some interesting histories about the work which he and Professor Harvey Wiley, chief chemist of the Department of Agriculture, had done. Professor Wiley thought that Dr. Eccles was mistaken in announcing that more than one alkaloid was contained in the seed, but later he confirmed Dr. Eccles' belief. The principal alkaloid, which is called calycanthine gives exceedingly distinct color tests. Its probable formula is  $C_{17}H_{21}N_2O$ . Its percentage composition was obtained from a large number of combustions, the results of which averaged, C, 71.56; N, 15.26; H, 8.84; O, 4.84. The specific gravity of calycanthine at 26 degrees C. is 1.455, and its melting point 219 C. This substance is remarkable in having the highest known specific rotary power of any organic body, which is plus 651.75; it crystallizes in simple trimetric octahedrons. These crystals were carefully measured and drawn by Professor Melville of the Geological Survey. Quinoline with a rotating power of plus 280.85 is the only alkaloid whose rotating power is near calycanthine.

Dr. Eccles said that during November, December, January and February he had devoted considerable time to studying this interesting substance and had isolated from the same source a new acid which seems to be related to citric and tartaric acids, but which reacts differently from either of these under tests, and which exhibits differences from all acids which he knows. He has also isolated two new alkaloids, one of which is crystalline and one amorphous; both exhibit a yellow to golden orange color when treated with nitric acid, while calycanthine under the same treatment turns bright green. The one which is crystalline is appropriately called glaucusine, from the species of plant from which taken, *Calycanthus glaucus*, (?) and the amorphous has been named sequatchine (?) from the county in Tennessee in which the calycanthus is found. He has also isolated three different alkaloids by decomposing calycanthine. One of these has salts, all of which are brilliant green, and this has been called thallecanthine; another gives salts which are bright yellow in color and which has been called chrysocanthine. No name has yet been assigned for the third.

From calycanthus three forms of albumen have been extracted. One of these coagulates like milk and forms lactic acid like milk. Dr. Eccles exhibited the other

two scaled like pepsin. Calycanthus Starch gives a bluish to olive green color with iodine, and sugar is always present in the seeds. The doctor congratulated himself in having produced the most beautiful crystals ever made, because of the very high index of the refraction of calycanthine. They were indeed very brilliant and were far more beautiful than any diamond.

## INCIDENTS OF THE CLEVELAND MEETING.

Prof. A. A. Breneman told many incidents of interest which occurred at the Cleveland meeting of the society. He said that there is scarcely a city in the country in which the feeling for chemists is so strong as it is in Cleveland. There the Chamber of Commerce welcomes the chemists to its meetings, and there, as in no other city, the manufacturers realize that it is to their interest to work in connection with the chemists. Cleveland is particularly strong in iron and oil industries. It is the center of the Lake Superior iron trade. The meeting was held in the Medical Department of the Western Reserve and the Hollenden Hotel was made the headquarters of the society. Over 100 persons registered, but this number of course included some camp followers; Dr. Breneman said that at least 85 were chemists who had come to Cleveland for the meeting. The speaker clearly explained that this gathering was a meeting of Western chemists, and said that only seven or eight of those present came from New York and the New England States. The younger members of the society were out in full force. Dr. Breneman said that he thought that Cleveland would soon have its own chapter of the Chemical Society, although some of the local men felt that it might be better for them to have a society of their own.

At the New York meeting, held previously a desire was shown for the society to make some standard scheme for the analysis of milk. At that time it was decided that it would not be then wise to undertake the setting up of standards. At the Cleveland meeting, however, Dr. Wolcott, director of the U. S. G. S., asked that a standard of analysis for coke and coal be adopted. A committee will shortly be appointed to undertake this work. He then told of the interesting excursions and valuable papers which were enjoyed by the delegates, and in his pleasing manner Dr. Breneman told of the things which interested him most.

## THE NEW ILLUMINANT.

Dr. Durand Woodman gave a short, but very interesting display of the illuminating power of acetylene gas. He said that the great difficulty in manufacturing acetylene was that one had no control over the acetylene if the calcium carbide was put directly into water. The evolution of the gas, he said, was so rapid that it would blow water out of a battery jar. Dr. Woodman's scheme for controlling the evolution of the gas was a most simple one and one which can be tried on any lecture table. He had an ordinary piece of gas pipe a foot long, on one end of which was fastened a gas burner; through the other end of the pipe he put a mixture composed of about  $\frac{1}{2}$  ounce of calcium carbide and 3 ounces of sand and then covered the end of the pipe with a wire gauze. This pipe was placed in a glass cylinder and water gradually poured in; this caused an evolution of acetylene, which flowed through the jet at the top of the pipe, and was lit, giving a most

brilliant flame. Dr. Woodman said that this apparatus was worked for about 10 minutes, and that the only attention which was required was the addition of water as the pressure within the pipe decreased.

This terminated the proceedings, and the meeting adjourned.

## THE SOCIETY OF CHEMICAL INDUSTRY.

## MEETING OF THE NEW YORK SECTION.

The February meeting of the New York Section of the Society of Chemical Industry was exceptionally well attended and proved one of the most interesting of any held recently. Alfred Hy. Mason had recovered sufficiently from his bronchial affection to preside, and H. Schweitzer, the honorary secretary, recorded the proceedings. The list of papers read included the following: By G. W. Thompson, "The Analysis of Alloys of Lead, Tin, Antimony and Copper;" by A. W. Warwick, "Laboratory Testing in Connection with Gold Milling;" by H. Van Hoevenbergh, "Petroleum Lamp with Automatic Lighting Arrangement;" by R. C. Schüpphaus, 1, "Modified Separatory Funnel;" 2, "An Extracting Apparatus adapted for the Analysis of Smokeless Powder."

Mr. Thompson's paper was one of great value to the metallurgist and provoked considerable discussion. It will probably be printed in full in the journal of the society.

Mr. Warwick's paper, which was read in the absence of the author by Chairman Mason, consisted of a *résumé* of the better known processes for the estimation of gold in mixed ores, and embodied a protest against the poor facilities which are given to chemists in the prosecution of their work at the milling stations. They were expected to conduct their assays and experiments in very restricted quarters as a rule, and their comfort or convenience was seldom consulted in the arrangement of their laboratories. The subject of gold ore assays was treated from the technical standpoint.

An ingenious application of electricity to the automatic lighting of petroleum lamps was shown by Mr. Hoevenbergh. This consisted of a dry battery connected by wires through the central draft of the lamp with a piece of spongy platinum held in contact with the wick. The battery, of small dimensions, is stored immediately below the oil reservoir and is operated by a push button attached to the outside of the reservoir. The lamp can be lighted 2,000 times before exhausting the battery.

Drawings and description of a new modified separatory funnel and an extraction apparatus were shown by the inventor, R. C. Schüpphaus. The novelty in the first-mentioned apparatus consisted of a two way cock connected with separate tubes. In the case of a fluid separating into two layers the lower layer can be conveniently passed out into a receiver with one turn of the two-way cock and the remainder conducted into a separate receptacle by a separate movement of the stop cock. The flask differed from similar ones in having a funnel-shaped mouth, which obviates the danger of spilling in filling it.

The extraction apparatus shown consisted of a modified Soxhlet, in which the air tube ran straight from the receiver to the upper condenser.

The meeting was brought to a close by

an interesting exhibit of photographs made with X rays. A number of the members had experimented with the new method of photographing invisible objects, and an interesting discussion resulted.

The meeting was preceded by the usual informal dinner, arranged for by Mr. Hartford, the chairman of the Chemical Industry Club.

### Interesting Papers Read in Philadelphia.

The usual pharmaceutical meeting of the Philadelphia College of Pharmacy was held last Tuesday, with a good attendance of members and others. The programme was an interesting one, Charles H. La Wall, the assistant chemist of the Smith, Kline & French Company, being down for a paper on "The Shaddock or Grape Fruit, and Some of its Applications in Pharmacy;" Henry B. Gilpin, "Bitterless Cascara Sagrada," and J. H. Schroeder, on "The Use of Oxalic Acid in Preserving the Color of Plants." The papers were accompanied by specimens and photographs of special interest.

#### PREPARATIONS OF GRAPE FRUIT.

Mr. La Wall outlined the early history of the grape fruit, and said it must have been in the minds of some of the ancients, and probably existed in the Garden of Eden; but as the fruit was not a general favorite, he wondered how our first ancestor could have been led astray by it. The fruit was originally indigenous to a small part of Asia, and has been introduced in nearly all parts of the tropical world. Its medicinal and refrigerant qualities seemed, however, to be more highly appreciated in hot climates than in temperate zones. The fruit has been known to attain a large size, some specimens weighing as much as 15 pounds. In pharmacy there does not seem to be much application for the fruit, though many physicians claim a certain merit for the juice in dyspepsia and stomach troubles, and the bitter part of the fruit, which is perceptible throughout, is thought by many to have great tonic properties. The author had prepared a syrup and a wine from it and samples of these were shown. The paper was a lengthy one, but full of interest.

#### FORMULA FOR BITTERLESS CASCARA.

Mr. Gilpin's paper on bitterless cascara embodied a formula and process for manufacturing a palatable preparation of the bark. The process was described at length, and we regret that the details reached us too late for insertion in this number. The formula is as follows:

	Grams
Cascara sagrada.....	500
Liquorice.....	110
Cloves.....	5
Calcined magnesias.....	10

#### OXALIC ACID TO PRESERVE PLANTS.

J. N. Schroeder, in an interesting paper, told how to preserve the colors of plants and flowers in a herbarium, and exhibited beautiful specimens over a year old as bright as the day they were mounted. The specimens are subjected to the action of a 3 per cent. solution of oxalic acid, some flowers requiring less and others more.

Wallace Proctor exhibited several specimens of the prepared anhydrous fats made by the Snyder Pharmacal Company of New York, and explained the process of manufacture.

## Detection of the Newer Medicaments.

Professor Dragendorff and his assistants have carried out an extensive and exhaustive series of investigations as to the characteristics of a number of the newer additions to materia medica. The paper as published in the *Archiv der Pharmacie* embraces descriptions of the physical properties and therapeutic effects as well as the analytical reactions. We present herewith the continuation of an original translation of that portion of the paper which refers to the qualitative tests for the remedies named. This is in continuation of the installment which appeared on page 81 of the issue of February 10.

#### METHYL SALOL.

An alcoholic solution of methyl salol gives a violet color with ferric chloride. A mixture of methyl salol with sulphuric acid gives the following reaction: With nitric acid, orange (1 to 5,000). With potassium nitrite, a red brown, turning first to green and later to dark blue. With a trace of ammonia molybdate it turns blue (1 to 12,000). With Fröhde's reagent it turns blue rapidly and changes to green (1 to 60,000). With vanadic sulphuric it turns violet and then green (1 to 100,000). With potassium selenate it turns yellow and then green. With selenous acid this solution turns violet, turning to red brown on heating.

#### SALACETOL.

In alcoholic solution salacetol turns violet upon the addition of ferric chloride, and this color is restored on adding hydrochloric acid. In dilute soda solutions salacetol reduces Fehling's solution. A solution of salacetol in dilute sulphuric acid gives the following reactions: With potassium nitrate a carmine red (1 to 4,000). With ammonium molybdate it turns blue. With Fröhde's reagent it turns violet and then red (1 to 6,000). With vanadic sulphuric solution it turns green (1 to 100,000). With potassium bichromate it turns brown and then green. With resorcin the sulphuric acid solution turns orange (1 to 15,000).

#### SALOPHEN (ACETYL-PARA-AMIDO-PHENOL-SALICYLIC-ESTER.)

When boiled with sodium hydrate solution salphen turns blue and then yellowish red; on being shaken the blue color is restored, and on adding potassium iodine it turns green. The solution turns blue when boiled with barium hydrate. An alcoholic solution gives a violet color with ferric chloride (1 to 150,000). On boiling with hydrochloric acid, cooling and adding a little phenol and calcium hypochlorite a red color is produced which turns blue on the addition of ammonia. An alcoholic solution on the addition of sulphuric acid, and boiling, gives off an odor of acetic ether. Salphen makes a colorless solution with concentrated sulphuric acid, which turns to reddish brown on heating. The sulphuric acid solution turns green on the addition of potassium bichromate, and brown on the addition of potassium chromate.

#### SALOCOLL (PHENOCOLL SALICYLATE.)

A sulphuric acid solution of salocoll turns red on the addition of potassium nitrate, changing to orange and yellowish green; it turns red on addition of potassium nitrate; it turns orange, green and

<sup>1</sup> This reagent consists of a solution 0.1 gm. of ammonium vanadate in 10 ccm. of concentrated sulphuric acid, the action is carried out in the same manner as with Fröhde's reagent.

blue on addition of ammonium molybdate; it turns orange on addition of Fröhde's reagent, changing in one hour to green; with vanadic sulphuric acid it turns red, yellow, green and finally blue.

The addition of ferric chloride to an aqueous solution of phenocoll produces a characteristic salicylic acid reaction. On adding bromine water to an aqueous solution a white precipitate is formed, and on adding ammonia to the filtrate it turns brown. On adding phenol and potassium hydro hypochloride to an aqueous solution a violet color is produced, changing to green.

#### TOLYSAL (TOLYPYRIN SALICYLATE).

An aqueous solution gives the salicylic reaction the ferric chloride, but the color disappears on the addition of sulphuric acid. Mayer's reagent are mercuric chloride or tannin produce a precipitate with an aqueous solution. On heating with 25 per cent. nitric acid a wine red color is produced, changing to yellow on the addition of ammonia. (This reaction is the same as that of antipyrin.) On warming with nitric acid a blood red color is produced, which turns blue on evaporation. Antipyrin turns yellow. The residue from the evaporation turns yellow on the addition of ammonia, and brown red on the addition of sodium hydrate. With nitrous acid a green color is developed on adding two drops of nitric acid and arsenic oxide, changing to a blood red on the addition of fuming nitric acid (same reaction as antipyrin). With sulphuric acid and vanadic sulphuric acid tolysal turns olive green.

#### AGATHIN (SALICYLIC-ALDEHYDE-METHYL-PHENYL-HYDRAZIN).

Agathin turns reddish yellow with sulphuric acid, and the sulphuric acid solution shows the following reactions: With a trace of nitric acid it turns blue and later green (1 to 20,000); with hydrogen peroxide (1 to 240,000) or potassium bichromate (1 to 400,000) it turns violet with resorcin or pyrogallol it turns orange; with thymol it turns purple (1 to 800,000); with ammonium uranate (1 dram plus 20 ccm. sulphuric acid) it turns blood red, changing on being warmed to greenish.

Agathin turns red on being heated with a solution of orcin in hydrochloric acid and orange on being heated with a solution chloroglucin in hydrochloric acid.

#### PYRODIN (HYDRACETIN, ACETYL-PHENYL-HYDRAZIN).

Pyrodin forms colorless needles melting at 128 to 129 degrees C. It dissolves in concentrated sulphuric acid, forming a colorless solution which turns pink on warming.

The sulphuric acid solution gives the following reactions: With one drop of ferric chloride solution it turns to a car-

mine red (0.001 gm. to 6 drops); with more ferric chloride it turns orange (1 to 30,000). It turns raspberry red on the addition of potassium bichromate or of nitric acid, while hydrogen peroxide, sodium peroxide and vanadic sulphuric acid<sup>1</sup> gives a somewhat more carmine-like color.

Chromic mixture<sup>2</sup> produces a similar color change, as does also ammonium sulph-uramate solution<sup>3</sup>, and the same effect is produced by Lafon's selenic sulphuric acid<sup>4</sup> solution and by a mixture of 1 part of potassium seleniate with 140 parts of sulphuric acid.

Fröhde's reagent<sup>5</sup> dissolves pyridin first with an orange color, which is turned into purple red by heating. Erdmann's reagent<sup>6</sup> produces an orange color, turning to red on the addition of ammonia (1 to 100,000). Millon's reagent<sup>7</sup> produces after some time a permanent blood red color. Chlorine water colors the sulphuric acid solution orange. Concentrated nitric acid dissolves pyridin with an orange coloration (1 to 30,000). Liebermann's reagent<sup>8</sup> produces a beautiful purple red (1 to 20,000). Chlorinated water produces a reddish yellow precipitate in aqueous solutions of pyridin. Phosphomolybdic acid produces a blue color, chloride of gold a bluish green and violet color, the gold being reduced.

#### MALAKIN (SALICYL-ALDEHYDE-PARAPHENETIDIN).

Malakin, or Malacin, as it is generally rendered in English, dissolves in concentrated acid with the production of a citron yellow color. By warming gently with nitric acid an orange color is produced which disappears upon further heating and reappears upon evaporation of the liquid. After boiling in hydrochloric acid the solution formed produces a ruby red color with one drop of chromic mixture<sup>2</sup> and a reddish violet color with ferric chloride. When the solution formed by the aid of heat with hydrochloric acid is cooled and filtered, the filtrate produces a violet precipitate with chlorinated lime. When dissolved in chromium water and evaporated slowly malacin leaves a violet residue which turns blue upon addition of sulphuric acid. In aqueous and alcoholic solution malacin is colored blue by ferric chloride.

<sup>1</sup> Chromic mixture. 0.02 gm. of potassium bichromate and 10 ccm. of water and 30 gm. of sulphuric acid.

<sup>2</sup> Ammonium sulph-uramate solution. 2 ccm. of concentrated sulphuric acid and 0.1 gm. of ammonium uramate.

<sup>3</sup> LAFON'S SELENIC SULPHURIC ACID.—1 part of sodium selenate (or tellurate) in 20 parts of concentrated sulphuric acid.

<sup>4</sup> FRÖHDE'S REAGENT FOR ALKALOIDS AND GLUCOSIDES.—Dissolve 0.005 gm. of sodium molybdate in 1 ccm. of concentrated sulphuric acid; or, according to some, 0.01 gm. of the salt in 1 ccm. of sulphuric acid; or, according to others, 0.01 gm. of the salt in 10 ccm. of the acid. The reagent should be prepared immediately before use and must be entirely colorless.

<sup>5</sup> ERDMANN'S REAGENT FOR ALKALOIDS.—Mix 6 drops of nitric acid, of 1.25 specific gravity, with 100 ccm. of water and add 10 drops of this mixture to 20 ccm. of pure concentrated sulphuric acid. According to other authorities dilute 10 drops of nitric acid of 1.185 specific gravity with 20 ccm. of water and add 20 drops of this mixture to 40 ccm. of pure concentrated sulphuric acid.

<sup>6</sup> MILTON'S REAGENT.—Dissolve 1 part of metallic mercury in 1 part of nitric acid (specific gravity 1.42). Dilute with twice its bulk of water, and after 24 hours filter.

<sup>7</sup> LIEBERMANN'S REAGENT. (NITROSYLSULPHURIC ACID).—Potassium nitrate, 5 parts concentrated sulphuric acid, 95 parts.

#### LACTOPHENINE (LACTOPHENACETINE).

Lactophenine dissolves in concentrated sulphuric acid without color, the solution turning red on the addition of nitric acid or potassium nitrate, and then orange; on addition of potassium nitrate it turns to a dark violet; on the addition of milk sugar it turns to blood red. On boiling 0.1 gm. of lactophenine with 1 ccm. of hydrochloric acid and diluting with 10 ccm. of water, filtering and cooling the solution, the addition of three drops of chromic mixture<sup>2</sup> produces a ruby red color (Ritsert's reaction for phenacetin). With a solution of phenol and some chloride of lime this hydrochloric acid solution turns red, and upon the addition of ammonia, blue (indophenol). On adding hydrogen peroxide the hydrochloric acid solution turns red, and on addition of ferric chloride to ruby red.

On boiling lactophenine with concentrated hydrochloric acid for one minute, neutralizing the mixture with ammonia and adding kafrin and a trace of potassium nitrate a blue color is produced. When rubbed with nitric acid (0.8 gm. to 2 ccm.) lactophenine turns yellow. Dilute this mixture after one hour with water and a mass separates out which yields red crystals of orthonitrophenetidine when warmed with alcoholic solution of potassa and cooled. Bromine water produces no cloudiness in a 1 per cent. solution of lactophenine in hot water.

#### GALLANOL (GALLANILID).

The alkalis ammonia or soda dissolve galland with the production of a brown or red color (1 to 300,000). When dissolved in concentrated sulphuric acid gallanol produces a blue color, turning with a small amount of ammonium molybdate to a dirty green (1 to 10,000), with Liebermann's reagent<sup>8</sup> orange (1 to 60,000), with concentrated nitric acid, yellow. In aqueous solution gallanol turns to dull red on the addition of chlorine water, changing to green on adding a small quantity of ammonia and reddish violet on addition of a larger quantity of ammonia. Chlorinated lime produces a brownish color in an aqueous solution, turning to red on the addition of ammonia. On adding chlorinated lime to an aqueous solution acidulated with hydrochloric acid a violet color is at once produced. Ferrous sulphate produces a dark blue color in aqueous solutions (1 to 20,000), ferric chloride a bluish black (1 to 40,000); phosphomolybdic acid, green, turning on addition of ammonia to deep blue (1 to 20,000), and ammonium vanadate blue black. Potassium nitrate colors an aqueous solution yellow, turning to orange on heating and to wine red on addition of ammonia. Baryta water causes a green precipitate, the same as with gallic acid. Gallanol also reacts toward potassium cyanide in the same manner as does gallic acid.

#### ANALGEN (BENZALGENS, ORTHO-ÆTHOXY-ANA-MONOBENZOYLAMIDOCHELINOLIN.)

Analgen produces a green solution with dilute sulphuric acid, the color being discharged on addition of ammonia, with the production of a white precipitate soluble in chloroform. Concentrated sulphuric acid dissolves analgen with the production of a yellow color, the analgen separating out as a yellow precipitate under the addition of water. Concentrated nitric acid also forms a yellow solution, turning orange on heating and leaving an orange red residue on evaporation. Lafon's selenic-sulphuric

acid<sup>4</sup> dissolves analgen, forming a violet solution which turns reddish brown on the addition of water. The addition of water to a solution of analgen in vanadocin sulphuric acid<sup>1</sup> causes a green color, which turns to violet upon warming. When dissolved in chlorine water and the water evaporated off, a yellow residue is left. Ferric chloride colors an aqueous solution yellow, turning to brownish red on heating.

#### THERMODIN (ACETYL-PARA-ÆTHOXY-PHENYL-URETHANE)

Thermodin dissolves without color in concentrated sulphuric acid, the solution turning orange on the addition of nitric acid. Nitric acid produces a yellowish precipitate in a hydrochloric acid solution. Cane sugar produces a red violet color in the sulphuric acid solution. Liebermann's reagent dissolves thermodin with an orange red color. Fröhde's reagent dissolves it first without color, then yellow turning to violet (1 to 40,000). In the latter mixture color rings are formed later of yellow, green and other colors. Vanadic sulphuric acid turns a solution in concentrated sulphuric acid at first to a light green and later to a dark green. Furfural water turns a sulphuric acid solution yellow.

#### NEURODIN (ACETYL-PARA-OXYPHENYL-URETHANE).

Neurodin produces no characteristic color with sulphuric acid. On addition of nitric acid it turns orange, as does thermodin, but in addition the sulphuric acid solution shows green and red streaks (1 to 10,000). Potassium nitrate produces green and violet streaks, and later a brown color (1 to 10,000). Furfural produces a yellowish color. Neurodin is colored yellow in mixing with 1 part of potassium seleniate and 140 parts of concentrated sulphuric acid, but the solution turns green and blue on warming, and finally to an olive green (1 to 20,000). The reactions toward vanadic sulphuric acid and Fröhde's reagent are the same as those of thermodin.

#### SYMPHOROLS.\*

All three symphorols occur in colorless crystals, the lithium and strontium salts are easily soluble and the sodium salt more difficultly soluble in water. On agitating with benzol a cold aqueous solution to which a small quantity of concentrated sulphuric acid has been added caffeine goes into the solution in benzol and may be recognized by the ordinary caffeine tests. Without the addition of sulphuric acid the symphorols are not taken up by benzol from aqueous solutions, and cafeeo-sulphonic acid itself is taken up only with difficulty. In order to recognize symphorol in the presence of caffeine agitate the aqueous solution with benzol when the free caffeine will be obtained in the well known needle shaped crystals, then boil the aqueous solution adding hydrochloric acid and again shake out with benzol. If any caffeine is now obtained it can be stated that it had been produced by the decomposition of the cafeeo sulphuric acid. The symphorols resemble caffeine in that the residue left after evaporating solutions of them in chlorine water or in nitric acid, gives the murexid reaction with very dilute ammonia (1 to 120,000). They differ from

\* There are three symphorols; that known as N being the sodium (sodium), salt, the L being the lithium salt and the S being the strontium salt of cafeeo-sulphonic acid.



caffeine, in addition to the difference already given, in that the aqueous solution of symphorols are not precipitated by mercuric chloride, mercuric cyanide, platinum chloride and silver nitrate.

### A Water Bath for Making Ointment of Zinc Oxide.

At a recent meeting of the Kings County, N. Y., Pharmaceutical Society, which is reported in our news columns, W. C. Alpers of Bayonne, N. J., described a water bath which he uses for melting and bottling petrolatum ointments.

The bath consists of two cylindrical tin cans, the inner having a capacity of about a quart and being provided with a cover. The inner can is suspended by means of tin straps at the top in the center of the outer can, with a space of about  $\frac{1}{2}$  or  $\frac{3}{4}$  inch all around between the sides and the bottoms of the two cans. The inner can, which contains the ointment or oil, is fitted with an outlet tube at one side and at the bottom of the can, and this tube passes through the outer can and is provided with a stop cock.

Mr. Alpers stated that he had found the can very useful in bottling all kinds of ointments, and also in bottling castor oil during cold weather. He had furthermore found it to be of service in preparing oxide of zinc ointment. For this purpose he first triturated the oxide of zinc to a smooth paste with a small quantity of lard oil. He then placed in the water bath the requisite amounts of benzoated lard, to which he added a little wax to compensate for the oil used in making the paste, and applied heat until the whole was melted. This he allowed to run in a small stream into the mortar containing the zinc paste, stirring constantly until the whole was mixed to a uniform consistence. By a proper adjustment of the temperature and of the rate of flow the ointment will be stiff enough to leave alone by the time the last of the melted lard is incorporated.

**Acetylene Only Slightly Poisonous.**—From experiments made by M. Brociner on the poisonous properties of acetylene he finds that it is only very slightly poisonous, no more so than the ordinary carbides of hydrogen such as formene, ethylene and propylene. Animals subjected to mixtures containing large doses of acetylene did not succumb, even at the end of several hours, where care was taken to use enough oxygen and to renew the mixture of gas so as to provide against the product of the animal's own respiration. Blood will dissolve about 80 per cent. of its volume of acetylene. If the latter does combine with hemoglobin the combination is very unstable and not to be compared to that formed by hemoglobin with carbonic oxide.

**Silvering Mirrors.**—A method of silvering mirrors has recently been patented by M. Hans Boas, of Kiel. It is based on the fact that when one of the heavy metals forms the cathode of a vacuum tube containing a trace of hydrogen, this metal is volatilized by the current, and is deposited as a firmly adherent and highly polished layer on the walls of the tube. The mirror thus produced is said to be of much greater brilliancy than can be obtained by the methods commonly employed.

### A Convenient Arrangement for Continuous Percolation.\*

By J. A. FORRET.

Such preparations as fluid extracts and concentrated infusions are now very generally prepared by continuous percolation. When a portion of the drug has been macerated, it is transferred to percolators and exhausted by passing water slowly through the percolators. The fluid which is displaced from the first percolator is transferred to the second, and so on, and the second portion of the drug is macerated in that which passes through the last of the series. The second portion is percolated in the same way, that which passes through the last percolator being used to macerate the third portion. Without some arrangement whereby the fluid may traverse the entire series automatically, the process requires constant attention. When the percolators are placed in line with each other vertically, and the percolate is allowed to drop from one to another,

fixed at the required height by small wooden wedges.

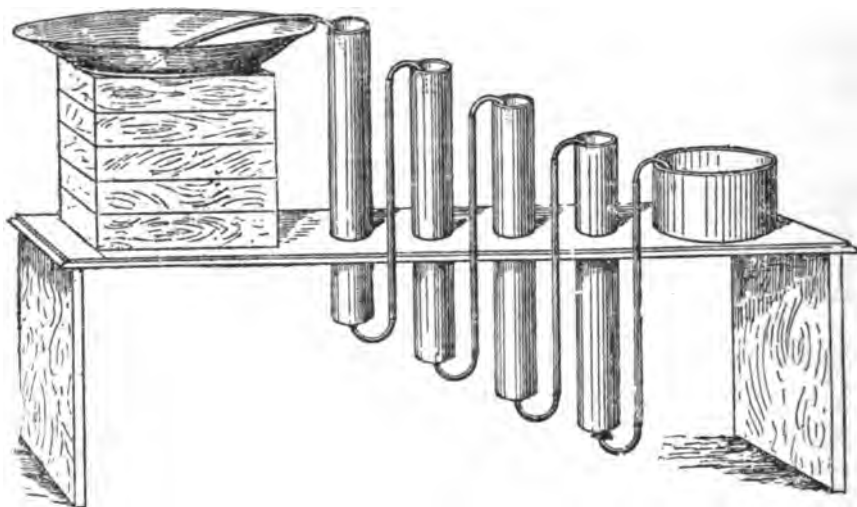
The percolators I have in use are the tins in which platinotype paper is sent out; they are 21 inches long, with a diameter of 8 inches. The bottom is pierced and a short length of metal tube soldered into the hole. A piece of rubber tubing of suitable length is attached to the metal tube, and the other end of the rubber tubing carries a piece of bent glass tubing, by which it hangs from the top of the percolator next in the series.

To prevent choking a perforated circular piece of tin, saucer shaped, is placed in the bottom of the percolator with its concave side downward, and above this a layer of tow or other suitable material.

### The Qualitative Examination of Acetanilid.\*

By CHARLES PLATT.

In view of the deficiency in the analytical literature of the acid anilids the following tests may prove of interest.



FORRET'S CONTINUOUS PERCOLATION APPARATUS.

there is no convenient means of adjusting the flow so as to guard against one or more of the percolators passing the percolate more rapidly than they are supplied with the liquid.

The drawing indicates an arrangement by which percolation may be effected through a series of percolators with very little attention. The percolators cannot overflow, nor can the percolate fall below the surface of the marc. With the first portion of drug, the basin, of course, contains water which is supplied to the first percolator by a siphon. The fluid from the last percolator drops into a vessel containing the second portion of drug. When the contents of the first percolator are exhausted, the basin may be lowered by removing one or more of the blocks, the siphon transferred to the second percolator, and so on.

When a sufficiency of percolate has passed through the last percolator to soak the next portion of the drug, the remainder, if any, is passed through the first percolator containing that portion, and exhaustion completed by water.

The support is a stout wooden box laid on its side; on the top are circular holes to receive the percolators, which are

The formation of acetanilid, or phenylacetamid,  $C_6H_5NHC_2H_5O$ , from anilin and glacial acetic acid,  $C_6H_5NH_2 + C_2H_3O_2H = C_6H_5NHC_2H_5O + H_2O$ , and the corresponding formation from anilin and acetyl chloride,  $C_6H_5NH_2 + C_2H_3OCl = C_6H_5NHC_2H_5O + HCl$ , suggest the adaptability of various color reactions with the acids and alkalis. The physical constants have been determined and the decomposition of the anilid made to serve for its identification.

Acetanilid is a white crystalline powder neutral in reaction and tasteless, but producing a slight burning sensation when placed upon the tongue. Examined under the microscope it is found to be made up of broken crystalline plates. The melting point, commonly given as 113 to 114 degrees, is determined by the writer as fairly constant at 112 degrees. Heated on platinum, acetanilid volatilizes without leaving a residue, and, when ignited, it burns completely with a yellow flame. At 15 degrees it is soluble in about 190 parts of water and in 5 parts of alcohol. It is soluble in 18 parts of boiling water and in about 5 to 10 parts of boiling alcohol. It is soluble in the cold in ether, chloroform, acetic acid, nitric and sulphuric acids, and, when warmed, in hydrochloric

\* Read at a recent meeting of the North British branch of the Pharmaceutical Society of Great Britain.

\* Journal of the American Chemical Society.



acid. On boiling with water, oil like globules separate out, and the solution on cooling recrystallizes in large but delicate six-sided plates.

**Reaction with Concentrated Nitric Acid.**—Acetanilid is easily soluble in strong nitric acid, the solution being colorless in the cold but turning to a yellow, then brownish red, on gentle warming, nitrogen oxides being at the same time evolved. The colorless solution on standing in the cold gradually acquires a light green tint, but finally changes, through yellow, to red, with formation of red acicular crystals. This red solution gives off the odor of nitrobenzene. A similar appearance and odor are produced by evaporating nitric acid solutions, an oily residue of decided odor being produced by rapid evaporation, a crystalline residue of slight odor by slow evaporation. The nitric acid solution has been described by one writer as colorless, by another as brown, then blue, then colorless.

**Reaction with Dilute Nitric Acid.**—The acetanilid is slowly soluble in the cold, and without change in color, but with separation of oil-like globules. This solution on slow evaporation gives a brown residue with slight purplish tint. By boiling with dilute nitric acid a colorless solution is obtained, with evolution of pungent fumes.

**Reaction with Concentrated Sulphuric Acid.**—A colorless solution is formed, unaffected by heating to boiling. The solution in cold concentrated acid, on long standing, acquires a pink to brown color. With an excess of the acetanilid the pink coloration develops quickly, is well marked, and changes gradually to an orange by reflected light. As a final change tufts of delicate acicular crystals appear and the solution gradually becomes colorless.

**Reaction with Sulphuric Acid and Potassium Chromate.**—A solution in concentrated sulphuric acid is turned to a dark green on addition of a few drops of potassium chromate. A solution in concentrated sulphuric acid, subsequently diluted, gives no reaction at first with the potassium chromate, but on standing is gradually turned to a reddish brown, and finally to a dark olive green. A similar reaction to the last is produced by addition of the chromate to a solution in cold dilute acid.

**Reaction with Hydrochloric Acid.**—The acetanilid easily dissolves in hydrochloric acid when warmed, and no precipitate is produced by subsequent dilution with water.

With hydrochloric acid and potassium dichromate there is no well marked reaction.

**Reaction with Hydrochloric Acid and Potassium Permanganate.**—An olive green coloration is obtained by adding a small crystal of the potassium permanganate to the solution in hydrochloric acid. On standing the color is changed to a mahogany brown.

**Reaction with Hydrochloric Acid and Chromic Acid.**—A solution of acetanilid in hydrochloric acid, diluted, and treated with a weak solution of chromic acid gives a yellowish green coloration, which gradually turns to a dark green. Potassium hydroxide produces a blue precipitate in this solution.

**Reaction with Hydrochloric Acid and Bromine.**—Bromine water added in excess to a solution in hydrochloric acid produces a heavy yellow to white precipitate of the monobrom derivative of anilin. This precipitate, examined mi-

croscopically, is found to be made up of a fine interlacing network of needles or fiber-like crystals. A similar precipitate is obtained by means of bromine water in a water solution of the acetanilid.

**Reaction with Hydrochloric Acid and Chlorine.**—Chlorine water added to a solution in hydrochloric acid gives a dark blue coloration which afterward fades. A similar reaction is obtained by substituting for the chlorine water a filtered solution of bleaching powder.

Mercuric chloride added to the hydrochloric acid solution gives no precipitate.

Dissolve some of the powder in a little hydrochloric acid and add, first, a few cubic centimeters of 5 per cent. phenol, then a little clear saturated solution of chlorinated soda or lime. The solution acquires a brownish red color, turning to a blue on addition of ammonium hydroxide in excess.

**Reaction with Potassium Hydroxide.**—By heating some of the powder with potassium or sodium hydroxide the characteristic odor of anilin is developed.

**Reaction with Potassium Hydroxide and Chloroform.**—By heating with potassium or sodium hydroxide and a few drops of chloroform the characteristic odor of an isonitrile is developed, phenylisocyanide being formed.

**Reaction with Sodium Nitrate and Sulphuric Acid.**—The powder mixed with sodium nitrate and sprinkled upon concentrated sulphuric acid produces a fine red coloration.

**Reaction with Ferric Chloride.**—A cold saturated water solution added to neutral ferric chloride produces no change in color.

**Reaction with Zinc Chloride.**—Acetanilid heated to 270 degrees with an equal weight of zinc chloride produces, first, orthoamidoacetophenone, in small amount, and then flavanilin,  $C_{12}H_9N$ , a yellow substance with a green fluorescence, a derivative of quinolin. It is stated in a number of text books that acetanilid boiled with zinc chloride anilin and acetic acid will produce amidoacetophenone,  $C_8H_7NH_2C_6H_5O$ , but this test is untrustworthy, inasmuch as the reagents used will produce this substance in absence of acetanilid. The paramidoacetophenone produced is crystalline in nature, while the ortho derivative formed in the previous test by heating zinc chloride and acetanilid is a yellow oil of high boiling point and with a characteristic sweetish odor.

**Reaction with Plugge's Reagent.**—Boil the acetanilid with water, cool and filter off if necessary, then boil again with potassium nitrite and dilute nitric acid. Mix with Plugge's reagent, a solution of mercurous nitrate with a little nitrous acid, and again heat to boiling. A deep red color is developed.

Antipyrin and phenacetin, two other popular antipyretics much used in medicine, may be readily distinguished from acetanilid by the foregoing tests. Antipyrin, for instance, with ferric chloride gives a deep red coloration and is precipitated from its solutions by mercuric chloride. It has approximately the same melting point as acetanilid, but, unlike the latter, is decomposed by further heating. The characteristic reactions for phenacetin have been given by the writer in a former article.\*

Comparative tests have been made upon various samples of acetanilid of domestic and foreign manufacture. The products of reputable houses seem to be

\* J. Anal. Appl. Chem., 7, 2.

practically identical with the exception of difference in perfection of crystallization and a corresponding difference in appearance.

### The Examination of Creosote Capsules.

The necessity of examining the contents of the various ready-made capsules on the market has frequently been dwelt upon, and such examination frequently shows very wide differences between the contents of the capsules and the statements as to the contents which appear on the labels. The following method of examining capsules containing creosote which was recently suggested by Sepin (*Rep. de pharm.*) will therefore prove of considerable interest:

Macerate 50 of the capsules of examination for several hours in barely sufficient cold water to cover them, and then heat carefully until the gelatin is dissolved. On cooling there will be two layers, the upper being oily and the lower gelatinous. Dissolve the oily layer in 25 ccm. of ether; again liquify the gelatinous mass by careful heating and allow it to cool, when the last traces of the oily creosote solution will rise to the surface and may be removed by a second portion of ether. By mixing the two ethereal solutions, evaporating and weighing the residue the weight of the creosote present in the capsule and of the oil will be obtained. To separate these two, shake the residue twice with 10 ccm. of alcohol (94 per cent.), which dissolves the creosote while the oil remains behind. After pouring off the alcohol, heat the oil until the last traces of alcohol are driven off and weigh it. The difference between the figures thus given and the total weight of the residue after the evaporation of the ether will give the quantity of the creosote present.

This method is available for analysis of creosote solutions in oil, such as cod liver oil, almond oil, peanut oil and olive oil. The quantity of creosote found may occasionally be a little in excess of the actual amount present on account of the slight solubility in alcohol of some of the oils used.

### Hard Rubber Out of Sawdust.

A German patent has recently been taken out on the production of an imitation of hard rubber out of sawdust, which consists in mixing sawdust with chromatinized glue, forming the object out of this mass by pressure between wooden or metal forms, then placing it in heated oil, varnish or tar until all the moisture is driven out of the sawdust. The article is then placed in a drying oven, where it is heated to between 400 and 600 degrees F., where it soon takes on the appearance and properties of hard rubber. Sawdust of resinous woods are particularly adapted for this imitation. It is interesting to note in this connection that while our Western rivers were once almost choked with the sawdust from the sawmills, since the introduction of the thin band saw trouble in disposing of sawdust has become quite rare.

### STYPTIC TAMPONS FOR OBSTINATE NOSE BLEED.

Tannin.....	25 grains
Benzolic acid.....	25 grains
Carbolic acid.....	25 grains
Collodion, flexible.....	1 fl. ounce

Impregnate absorbent cotton with this styptic and plug with it the posterior nares.—*Rougier.*

# A Comparison of the More Recent Methods for the Assay of Cinchona Bark.\*

BY LYMAN F. KEBLER, B.S.,

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No less an authority than Dr. Fr. Hoffmann, in a review of a recent text-book of pharmacy, commented on its omissions as follows: "Among the latter (omissions) may be mentioned the desirable introduction of a chapter on the valuation or estimation of alkaloidal galenical preparations, a subject of constantly increasing importance in manufacturing and dispensing pharmacy. Although still in a state of evolution and imperfection, several methods of considerable value for the identification and estimation of drugs, as well as their fluid extracts and tinctures, have been established during recent years. The importance of the application of pharmaceutical research in this direction, and the valuation of the therapeutical constants of important plant remedies, is now of such a recognized prominence that it is one of the foremost problems in pharmacy."

## ASSAY OF CINCHONA.

In selecting a method for assaying cinchona bark due consideration must be given to the kind of information desired. While the pharmacist does not require as elaborate a method for standardizing his preparations as the manufacturer of quinine in selecting his barks, yet he ought to be in possession of a process that yields no less accurate and satisfactory results in a comparatively short time.

The methods considered most efficient and practicable for extracting the alkaloids both from the bark and its galenical preparations may be classed as follows:

1. The powdered bark or its preparations are macerated with ether and ammonia water, or a mixture of chloroform, ether and ammonia water, and an aliquot part taken for analysis. Schweisinger-Sarnow,<sup>1</sup> Keller<sup>2</sup> and the author.<sup>3</sup>
2. The powdered bark or its preparations are macerated with a mixture of chloroform or ether, or a mixture of both in conjunction with alcohol and ammonia water, and an aliquot part taken for analysis. Prollius,<sup>4</sup> De Vrij,<sup>5</sup> Lyons,<sup>6</sup> Haubensak,<sup>7</sup> Kürsteiner<sup>8</sup> and U. S. P., 1890.

Table I is given to show at a glance how closely some of the extractive solvents of the various methods approximate one another.

The time required for the execution of the several processes varied from six to 24 hours, unless stubborn emulsions were encountered, as is not infrequently the case with several of the above processes.

\* Read at a meeting of the Philadelphia College of Pharmacy.

<sup>1</sup> 1890. Pharm. Centralhalle, 51, 771.  
<sup>2</sup> 1892. Schweiz. Wochenschr. f. Chem. u. Pharm., 30, 501, 508; Am. J. Pharm., 65, 78, 1893, Ztschr. Oesterreich. Apotheker, 47, 563, 586; Am. J. Pharm., 66, 42.  
<sup>3</sup> 1895. Am. J. Pharm., 67, 499; J. Am. Chem. Soc., 17, 822.  
<sup>4</sup> 1881. Arch. d. Pharm., 209, 85, 572; Am. J. Pharm., 54, 59.  
<sup>5</sup> 1882. Neder. Tijdschr. de Pharm., January; Am. J. Pharm., 54, 230.  
<sup>6</sup> 1884. Druggists' Circular, 23, 114; Pharmaceutical Assay, § 13, 14, 29-30, 127, 128.  
<sup>7</sup> 1891. Schweiz. Wochenschr. f. Pharm., 23, 147; Am. J. Pharm., 63, 347.  
<sup>8</sup> 1892. Schweiz. Wochenschr. f. Chem. u. Pharm., 30, 473; Pharm. Ztg., 37, 750; Am. J. Pharm., 65, 71.

## PROLLIUS' METHOD.

The introduction of Prollius' method marks a new era in drug assaying. This method contains the germ from which have sprung nearly all of the most valuable methods of recent date. Prollius proposed to employ an ethereal solvent for estimating the ether-soluble alkaloids, and a chloroformic mixture for extracting the total cinchona alkaloids. It was originally designed for determining the alkaloidal value of cinchona bark, but the various modifications proposed

above agglutinates into small particles that envelope the alkaloids. These small particles being insoluble in the menstruum employed, makes it impossible to recover the alkaloids so occluded. In connection with the sulphuric acid, Dr. A. B. Lyons employs ether, which appears to facilitate the extraction somewhat.

The writer has frequently treated the gummy residue with an undue amount of water, but the filtrate, when tested for alkaloids, always responded affirmatively. In view of this fact, the following experi-

TABLE I.—TABULAR VIEW OF THE AGENTS EMPLOYED IN EXTRACTING THE ALKALOIDS, ETC.

Process.	Cinchona bark.	Alcohol.	Chloroform.	Ether.	NH <sub>4</sub> OH 10 per cent.	Amount of menstr. taken per assay.	Color of alkaloids.
U. S. P., 1890.....	20 gm.	152 ccm.	40 ccm.	.....	8 ccm.	100 ccm.	Chocolate.
Prollius.....	20 gm.	20 gm.	.....	170 gm.	10 ccm.	120 gm.	Chocolate.
Lyons Nos. 1 and 2 <sup>1</sup> .	20 gm.	13.8 ccm.	.....	180.7 ccm.	5.5 <sup>2</sup> ccm.	100 ccm.	{ No. 1 chocolate. No. 2 nearly white.
Lyons Nos. 1 and 2 <sup>2</sup> .	20 gm.	13.7 ccm.	48.9 ccm.	187 ccm.	5.4 <sup>2</sup> ccm.	100 ccm.	{ No. 1 chocolate. No. 2 nearly white.
Haubensak.....	20 gm.	20 ccm.	.....	170 ccm.	10 ccm.	100 ccm.	Nearly white.
Haubensak and Kürsteiner <sup>3</sup> .....	20 gm.	30 gm.	.....	170 gm.	15 ccm.	100 gm.	Nearly white.
Haubensak and Keller.....	12 gm.	.....	.....	120 gm.	10 ccm.	100 gm.	Yellowish white.
Chloroform-ether <sup>4</sup> .	20 gm.	.....	50 gm.	150 gm.	20 ccm.	100 gm.	{ Whiter than any other process.

<sup>1</sup> Prollius' mixture.

<sup>2</sup> Prollius' fluid modified.

<sup>3</sup> Moistens the drug first with 5 gm. of 12.19 per cent. hydrochloric acid.

<sup>4</sup> The method as used by the writer for several years and applied to the various drugs and their preparations. Mr. Keller has recently published a process for assaying cinchona bark that approximates this one very closely. Schweiz. Wochenschr. f. Chem. u. Pharm., through the Pharm. Era (1893), 15, 73.

<sup>5</sup> Strong ammonia water.

now make it possible to apply the process to a large number of narcotic drugs and their preparations. At first it was deemed essential to macerate the drug 24 hours, but experiments have proven that four hours, with a fine powder, is ample time. In this work, maceration for all methods, with the bark, was continued about four hours, with repeated agitation.

The fluid extracts were prepared as follows: Fluid extract No. 1: 100 gm. of the drug were macerated three days with a menstruum composed of alcohol two parts, glycerin and water each one part; the percolation was then allowed to proceed, gradually adding of the above mixture until 150 ccm. of the percolate were obtained. Fluid extract No. 2 was prepared in the same way as the above except that the U. S. P. menstruum was employed. Fluid extract cinchona calisaya was prepared on a large scale. The fluid extracts were prepared from the respective barks assayed below.

With the processes involving the extraction of the alkaloids by means of immiscible solvents, the fluid extracts were diluted with an equal weight of water, then treated directly with the solvents for one hour, with frequent agitation, and an aliquot part taken for analysis. Fluid extracts Nos. 1 and 2 were only two-thirds normal strength, but the per cent. of the alkaloids is based on a normal extract. Under these conditions the results obtained are given in Table II.

The results indicate that the methods which evaporate an aliquot part of the extractive solvent, then extract the partly dried residue with dilute sulphuric acid, and subsequently shake out the alkaloids, do not yield the full amount of the active constituents. This is undoubtedly due to the presence of the gummy extractive matter, which when treated as

ment was made: the gummy residue was washed with water until the filtrate was only slightly acid to litmus paper; this required about 180 ccm. The filtrate was now collected in a graduated cylinder. After the first 100 ccm. were obtained,

TABLE II.

Process.	Per cent. of alkaloids in cinchona calisaya.				Per cent. alkaloids in fluid extract cinchona calisaya.		
	1	2	3	Average	1	2	Average
U. S. P., 1890..	8.20	7.99	8.20	8.13	5.80	6.00	5.90
Chloroform-ether.....	9.57	9.31	9.40	9.42	6.41	6.39	6.40

Process.	Per cent. of alkaloids in cinchona rubra.		Per cent. of alkaloids in fluid extract cinchona rubra No. 1.		Per cent. of alkaloids in fluid extract cinchona rubra No. 2.	
	1	2	1	2	1	2
U. S. P., 1890.....	4.57	2.43	.....	.....	.....	.....
Prollius.....	4.56	2.57	.....	.....	.....	.....
Lyons No. 1.....	4.79	2.49	.....	.....	.....	.....
Lyons No. 2.....	5.73	3.39	.....	.....	.....	.....
Lyons No. 3.....	4.97	.....	.....	.....	.....	.....
Lyons No. 2 <sup>2</sup> .....	5.81	3.51	.....	.....	.....	.....
Haubensak.....	5.96	3.43	.....	.....	.....	.....
Haubensak and Kürsteiner.....	5.90	3.59	.....	.....	.....	.....
Haubensak and Keller.....	5.27	3.61	.....	.....	.....	.....
Chloroform-ether.....	5.77	3.50	.....	.....	.....	.....

<sup>1</sup> Prollius' mixture. <sup>2</sup> Prollius' fluid, modified.

the issuing filtrate was tested by both Wagner's and Mayer's reagents; both gave heavy precipitates. The residue was now treated with a few drops of dilute

sulphuric acid, the particles disintegrated, with a stirring rod, as much as possible, and washed with water until a second 100 ccm. were obtained. The filtrate was again tested as above, with the same results. The above operation was continued until 500 ccm. were obtained, testing the filtrate at intervals of 100 ccm. After 500 ccm. had passed the filtrate still gave a turbidity with both of the above reagents. These results demonstrated to the writer that it was practically impossible to obtain all of the alkaloids by the methods embodying the above procedure.

Another difficulty inherent in these methods is the proneness of the immiscible solvents to emulsify, and the slowness of separation. This is undoubtedly due to the mechanical action of the particles thrown out of solution on rendering the latter alkaline. It was necessary to discard several assays in this work on account of this objectionable feature.

#### THE U. S. P. METHOD.

According to the U. S. P. process, we are to obtain 150 ccm. of the extracting menstruum, after treating the bark; but the writer's experience has been that only about 140 ccm. are obtained. The other 10 ccm. are only obtainable by applying pressure to the bark on the funnel, which is objectionable, if not detrimental.

The method of Prollius yields impure alkaloids and possesses several undesirable features.

#### SATISFACTORY METHODS OF ASSAY.

The methods that have proven quite satisfactory are those in which the immiscible extractive solvents are directly shaken out with acidulated water. Kfirsteiner's modification of Haubensak's method does not appear to possess any advantage over the original process. Keller's modification of the same process must be considered of secondary importance, although very good, from the fact that Mr. Keller has published a second and better method for the same drug. After eliminating the above processes, we have left three methods that leave very little to be desired—viz.: Lyons' general process No. 2 with Prollius' mixture, Haubensak's, and the chloroform-ether process. With the bark these methods varied from one another only 0.3 per cent., while with the fluid extracts there was even less variation. The color of the alkaloids of these methods is also very good. Those obtained by Lyons' and Haubensak's methods possess a slight chocolate color, while those obtained by the chloroform-ether process are more nearly white.

In conclusion, it is only necessary to say that while the author favors the chloroform ether process, he cannot consider it superior to the methods of Lyons and Haubensak to any extent.

#### A Novel Magnesium Light.

Magnesium powder is placed between two thin impenetrable sheets of paper which are coated with paste. They are then stuck together. After drying, a sheet of paper impregnated with potassium chlorate is placed on each side of the package. For an envelope a wider sheet of paper is pasted about the packet so that the whole forms a thick leaf of paper, which can be cut with a scissors into strips. To produce the light one of the strips is held in a tongs and ignited, when it burns with a brilliant magnesium light. The magnesium paper prepared in this way is claimed to be durable and entirely free from danger.

#### The Use of Drugs.\*

By W. R. GOWERS, M.D., LOND., F.R.S.

The physician's experience of the use of drugs is acquired under conditions not altogether favorable. It is his task to deal with cases that have resisted the efforts of practitioners who are often wise, persevering and equipped with knowledge in a degree increasingly adequate and effective. Success in treatment by drugs after such antecedent efforts seems to me to testify to the undeveloped capacities in the means employed. However this may be, I am convinced that the method of treatment to which the average practitioner is chiefly restricted now, as he was in the past, to which he is limited by a compulsion not less at the present time than in former days, has not only a power that can be realized now, but also a potentiality yet to be developed.

It has therefore been with great interest that I have seemed of late to see more clearly why this should be. When I say "I have seemed to see it," I do not mean that it is not conspicuous to many. The skepticism regarding the use of drugs to which I have referred is, I think, less now than a few years ago. One favorite foothold was the statistical demonstration of inutility—as, for instance, that the average duration of acute rheumatism was the same whatever treatment was employed or when no agents were used. That is no longer possible, since we have sought help from the willow which casts its shadow on the damp places in which there thrive the bane and antidote. Since the salicylates were employed I fancy the significance of the loss of this convenient argument has been felt. Then, moreover, the empirical advice, "Try all things; hold fast that which is good," to which in the hands of peasants we owe many of our most precious aids, has been applied to the results of modern chemistry, and every tangible achievement of science has been seized by the "advanced pharmacy" of the present day.

#### THE POTENCY OF DRUGS.

But can we discern the reason why drugs are useful? Consider. I show you two tubes. Each contains a small quantity of a white powder—about half a teaspoonful. Each consists of the same elements. One is practically harmless; the other contains within it the power of death to 1,000 men. The one is quinine; the other is aconitine—the alkaloid which makes so deadly the plant whose flower our ancestors called "monkshood" in the far-off days when the original was always before their eyes. It is an almost startling fact that in this minute quantity of powder, hardly visible to those at a distance, there is such a potentiality of death. Picture to yourselves 1,000 men. That which is in this tube would end the life of every one of them. There is a latent power within this powder beside which the lightning flash is feeble, and to which the earthquake might give place, so far as the comparison depends on lethal certainty. But the resemblance in the aspect of these two substances is not all. As I said, each consists of the same elements; each is made up of carbon, nitrogen, oxygen and hydrogen. Each consists of the elements which compose air and water, with some carbon added—soot, if you like. Why is one almost harmless,

and the other a most deadly poison? I might have chosen for the lower term of the comparison a simple food, but then the amount of nitrogen would have been less, and the resemblance in construction less close. The answer may be given, "It depends upon the chemical constitution." True, but this takes us a very little way. When we discern that the difference depends upon the way in which the atoms of the elements are arranged in molecules, and the molecules are grouped together, we are no nearer an explanation. We see a little more, however, when we realize that chemical constitution means that energy is held "latent" (as it is said) ready to be released when the elements can form simpler, closer compounds, and that on the same kind of constitution and the same kind of simpler union, and similar release of energy, in the constituents of the living tissues seems to depend all vital function. As far as we can see, all the energy which is released in the animal body is released in consequence of chemical union under the mysterious influence of life. When such union and such release are going on, the process may be changed entirely by the contact of molecules of allied constitution, with latent energy on the point of release, so held as to blend with that which is being set free as living tissue. Blending with this it may augment or oppose it. Remember that a difference in chemical constitution means a difference in the readiness with which the elements separate and re-unite, and on this depends the effect exerted by the energy they bear. I have recently endeavored to explain this in a small book,\* in which you can, if you desire, pursue these conceptions.

#### NERVE FORCE.

as far as we can see, is the result of such chemical change occurring under the influence of life in the molecules which compose nerve tissue. Chemical compounds may come into relation with the substance in which the change is occurring without exerting the slightest influence upon it. But another substance may come, even in amount inconceivably minute, whose molecules are so arranged as to fit in, as it were, with the changing molecules of the living tissue. The energy the new molecules bear seems to blend with that which is in process of ordered release in the living tissue, and to blend so suddenly and so effectively as to derange it entirely. The various nerve tissues which compose the centers seem to us the same, but they must differ in their precise chemical nature and in the precise chemical action which their life-work involves. This fact is revealed to us only by their different response to different chemical agents, but the revelation is often a startling one. The difference in response is certain, the uniformity in the nature of the agent is certain, and therefore the difference in result must be due to a difference in that on which the agent acts. Although we have no other evidence of this, consider the absolute significance of such facts as that atropine acts first upon the nerve substance of the eye, and strychnine upon that of the spinal cord.

#### THE ACTION OF ACONITINE.

Such an influence as I have spoken of seems to be almost universal in the case of aconitine. Its contact with any acting

\* Extract from an address delivered before the Harlesden Medical Society. Contributed by the author as a reprint from the London *Lancet*.

\* "The Dynamics of Life." (London: J. and A. Churchill, 1904.)

nerve structure seems to be, as it were, so direct, instant, and precise as to generate, as it were, an avalanche of energy, sweeping all before it, or opposing the process of liberation of energy with a momentum that involves a sudden stillness among the whirling atoms whose throb is far below the range of human sense. Among the nerves thus influenced may be those on which depends the action of the heart, and with a sudden spasm or a sudden stillness the heart stops and life is ended. That which so acts we call a poison. Widely different from this as is that vehicle for energy which we call a food, the difference is one of degree. Every form of food is such by taking to the tissues new energy in fresh molecules. Between the two—the poison and the food—there is an almost infinite gradation of substances whose influence is exerted in like way by chemical compounds upon the chemical processes of life, upon the state of nutrition, and upon the mode of action of the living tissues. It is in this intermediate region that there is the range of therapeutic influence conveyed by the vehicles we call drugs. The difference is of course in part one of quantity. But it is by the relation of the latent energy of the agent to the energy being released in the tissue, and to the secondary effect of the action thus produced upon nutrition, that one wide scope for the influence of drugs can be readily perceived. There are others, but they are different aspects of the same influence, and the facts may, I think, be best epitomized by the statement that treatment by drugs would be correctly named “dynamical therapeutics.”

#### OXIDATION IN THE SYSTEM.

Although I believe that it is generally true that what we call “matter” is only effective, whether it be employed as food, medicine, or as poison, because it is a vehicle for energy, some apparent exceptions should be at least mentioned. In the functional action of all structures in the body, molecules are constantly passing off which, having formed with oxygen lower compounds and having yielded their latent energy, are useless, and these are constantly being replaced by others formed under the influence of life from the material which the plasma has brought to the vicinity of the structure. It is possible that the molecules of some poisons may enter into the constitution of the tissues in abnormal amount, and thus disturb function by deranging the release of energy. There are also some cases in which atoms of some different element seem to enter and replace normal atoms, and thus derange. Whenever arsenic is brought in contact with the nerve elements, whatever be its combination, it induces not only functional, but also structural changes in these, leading ultimately to their degeneration. We can only explain this by supposing that atoms of arsenic are taken up by the nerve substance in the course of the molecular renewal which attends functional action, and it is reasonable to suppose that this is due to its close relation to phosphorus, which we know is a constituent of the nerve material. It is possible that such substitution may take place in a slight degree without any injurious consequences, and even, in morbid states, with benefit. The influence on the nutritional process may be actually beneficial when this is already in some way deranged. It may promote the subsequent due assimilation of phos-

phorus, and make this more adequate and effective. Of course this is only a speculation. It is sometimes a help to conceive how that may be which we cannot but perceive as a fact.

These remarks have reference, of course, only to the medicinal agents which act through the blood. There is a considerable scope for thought regarding the action of agents which do not pass into the blood, which act only upon the surface, or on that portion of our real exterior which is within us, as the alimentary canal. In this region, moreover, there is some room for bringing conception to the test of experiment. Many purgatives, of course, act through the blood, but chemical processes seem to take less part in the operation of saline aperients. These act rather by “flushing out,” the liquid in which the salt is dissolved being merely added to by osmosis and exciting contraction. The subject, indeed, requires more special study than it has received. The great service of salines seems to me to be effected by removing that which would be in part reabsorbed.

#### EMPIRICISM AND RATIONALISM.

One other phase of modern therapeutical thought is to me a mystery. It is the contrast which is often drawn between the empirical and the rational in the use of drugs, and the disparagement of the former in comparison with the latter. Possibly it is a result of the influence of the scientific training which now dominates medical education. Beneficial as this training is, its influence may acquire a momentum that carries the effect too far, and, indeed, its influence may spread too widely for the good of those whose lives are to be devoted to the hard and often routine work of applying knowledge. The intense love for pure science begotten in the better class of medical students of the present day, warm with the ardor of youth, makes them slow to sink into the grooves to which they are predestined, and hinders their perception of that which they might gain and see therein. They yield at once to the distinction between the rational in therapeutics and the merely empirical. It is all very well to esteem the rational, but we have, I hope, seen that this esteem should not be allowed to cause an aversion from that which is precious, and yet cannot be called “rational” in the common narrow sense of the word. The antithesis of the empirical and the rational is itself an error. It is an instance of a common tendency to put a positive conception into a negative word. Because the empirical is not the rational it is conceived as irrational—the only simple negative we have, but one that implies far more than simple absence of the quality excluded. The “irrational” should be merely the “not rational,” but in effect it carries us as far beyond neutrality as does “unreasonable.” No one means by “unreasonable” a simple absence of the quality of reasonableness. We are so accustomed to the use of the mere negative for the opposite positive that an effort may be necessary to perceive the real meaning of the words. Not only is the empirical not positively irrational; it is doubtful how we are justified in considering that a truly rational element is absent from the empirical. The term “rational therapeutics” is applied to treatment in which a drug is given with success in accordance with preconceived ideas or with a theory. The theory may turn out quite wrong, although the result is the

same. What, then, becomes of the rationality? In empirical therapeutics a drug is given because it is found by experience that in the particular condition it does good. Often we cannot even guess why.

#### THE THEORY OF MEDICINAL TREATMENT.

But the fact remains, and surely to act upon observed experience is as truly a rational proceeding as is action upon a theory which may be incorrect. After all, the medicinal treatment which can be based upon any definite theory is small. How seldom, moreover, can we use a drug to advantage which was discovered save by the purest empiricism. In not one drug in twenty, perhaps not one in fifty, of those of most certain service, can the use be traced to anything except unguided experiment. Our knowledge of these drugs, derived from the past—and often from the distant past—must be assumed to be the result of experiments innumerable, perhaps continued through the long tens of centuries in which the human race has lived among surroundings which alike compelled and suggested endeavors to counteract disease by every available means. The need for food must itself have led men to a knowledge of the physiological action of most herbs of the field, especially when domestication brought the habits of animals under observation, habits such as must have had the power of example. It is probable that since man became able to observe and to reason, every common herb of the field and fruit of the tree has been at some time tested, and thus by slow degrees the knowledge of a physical good and evil has been acquired.

#### OUR DEBT TO THE HERBALISTS.

It is strange, indeed, to note how far back goes the use of the drugs on which we most rely. Most of them can be traced into the mists of the popular knowledge which it is so easy to sneer at and would be so difficult to do without, or until they are lost in the bluer mists in which the distance shrouds alike the hills of Greece and deserts of Arabia, or to the time when the world learned its wisdom from the land where now only the sculptured symbols of man's thought stand silent in the cold moonlight of a long dead past. We smile at the popular herbal remedies. But it is to these that we owe the majority of our most useful drugs. I cannot conceive a therapist surveying a list of the chief drugs on which we depend in our daily work—and do not depend in vain—without a sense of wonder and perhaps of humiliation. We disinfect our rooms with burning sulphur; and so men did before the time of Homer. We purge sometimes with rhubarb, especially when some subsequent astringent influence is desirable, and so did the old Arabians for the same special reason. The value of castor oil in its chief use was familiar, probably for ages, to the natives of the East and of the West Indies before it was made known in Europe by a physician from Antigua 150 years ago. Aloes was employed in the same way long before the time of Dioscorides and Pliny. The knowledge of the influence of ergot in parturition we owe to the peasants of Germany, and the use of male-fern for tapeworm goes back to the old Greeks and Romans. The employment of mercury in syphilis by inunction and fumigation, which our nineteenth century therapists regard with such satisfaction, seems to go back to the time of the



Crusades, and it is said that its use can be traced in Malabar as far back as the ninth century. Podophyllin as a purgative we owe to the North American Indians. If we go through all the drugs on which we most rely we find the same story. Even in the case of those which are the latest additions to our resources, we find that, with very few exceptions, their use arose from what we must regard as pure empiricism. It was by accident that the local anæsthetic influence of cocaine was discovered. The unexpected results of simple experiments afforded us the chief use of antipyrine; and that which is perhaps the greatest practical discovery of modern times in the influence of drugs on disease—the use of bromides in epilepsy—was the result of a chance observation of its use on an allied state—also empirical. To this day we are without any rational perception of its mode of action or of the reasons for its use in given cases. I yield to no one in my sense of the importance of the rational in therapeutics; but we need to be careful lest, in contrasting the rational and the empirical, we allow our esteem for the one to induce a depreciation of the other. We can afford to despise no source or kind of help, or to permit our estimate to be lessened by the many warping influences to which our thought is liable.

I have, indeed, tried to frame a definition of rational therapeutics which I could illustrate by examples. I will not say that I have wholly failed, but my success is not sufficient to let me submit it for your consideration. But the attempt has impressed me with a doubt as to the propriety of considering that a theory, to explain an empirical discovery, makes the therapeutics rational. It is very easy to frame a theory of the action of a drug, and it is easy to extend this theory to the nature of the disease in which the drug does good, and at the same time to ignore the many other possible ways in which the effect may be produced, and so to build from a small and uncertain foundation an edifice which some new knowledge may reduce to that which most builders call "rubbish."

#### Jalap—Showing How it is Cultivated, and the Way to Know the Genuine Article.\*

The purgative qualities of jalap, *Ipomoea purga*, have been known in Europe since the sixteenth century. It is, indeed, a product of Mexico, and derives its name from the City of Xalapa, which for long has been the center of the jalap trade. The plant is found on the eastern declivities of the Andes, at an elevation of 5,000 to 8,000 feet above sea level, in such localities in which rain falls almost daily. The plant is a climber requiring support, such as stakes or trellis. The flowers are rose colored, and the jalap occurs in tubers, varying in size from a small nut to a moderate sized apple. The tubers are underground stems. Formerly all the jalap of commerce came from Mexico, but during later years India has contributed her share, and the plant has been produced in the cinchona plantations of Jamaica, but in many instances had to be abandoned, as the jalap thrives at the expense of the cinchona. The plant is said to grow freely in the southern parts of England, which fact is not generally known. Its flowers, however, appear so

late in the autumn that they seldom expand, and the tubers are mostly destroyed by frost if not well protected. The drug is described in the British Pharmacopœia as being the dried tubercules of *Ipomoea (Exogonium) purga*, imported from Mexico. Characteristics—varying from the size of a nut to an orange, ovoid, the larger tubercules frequently incised, covered with a thin brown wrinkled cuticle, presenting when cut a yellowish grey color, with dark brown concentric circles.

As jalap is only used in medicine, to obtain the highest prices it is necessary to place the product on the market in the form best known to the wholesale druggists, who are the principal purchasers.

It is important to get the real article, as other kinds are very often substituted, which are not of the same medicinal value. Some little knowledge of the drug is necessary to prevent imposition. Good jalap should be tough, hard and often horny, becoming brittle when long kept, and breaking with a resinous fracture. It should be of a pale dingy brown, or dirty white color, having a faint smoky coffee-like odor and a mawkish taste; the substituted article does not answer to these several tests. The real jalap owes its medicinal quality to the resin, but the plant also contains starch and sugar, which, however, do not crystallize, gum and coloring matters.

The cultivation—writing from definite knowledge—requires study, as it needs a rich soil, for the crop is an exhausting one, and it is not until a third year that a return may be expected, and it has been clearly proved that at least 1,000 dry tubercules can be gathered from a single acre under cultivation, and similar crops may be obtained every third year from the same plants thereafter. In Mexico, however, jalap is dug up during the whole year. The small roots are dried entire, the larger are cut transversely, so that they may dry the more easily. This drying process is a very difficult and trying one, for about 70 per cent. of the weight has to be evaporated, and it frequently happens, when dried in the sun, that there is a considerable loss on account of some becoming mouldy and others becoming subjects of fermentation.

This loss is sometimes prevented by gashing the tubers, or by cutting them in slices, but jalap thus prepared fetches a lower price in the English market.

Drying entirely by sun heat is not always possible, owing to the natural humidity of the climate. The roots are, therefore, placed in a net and suspended over a constantly burning hearth of an Indian's hut, where they are allowed to dry gradually, and this accounts for the smoky smell so often detected in the drug when purchased. This special characteristic is considered by many druggists to be a proof of good tubers.

The roots of other plants growing in Mexico, especially in the neighborhood of Orizaba, are imported into Europe either by themselves or as an adulterant of the real article, one of which is known in trade as Tampico jalap, and this special kind has figured largely in the importations of recent years. It therefore requires some little knowledge and experience to detect the false from the true; some cannot be distinguished by the eye from true jalap, and it is only by chemical tests that the real quality can be ascertained.

The experience gained in jalap cultivation in the Madras presidency in India has shown that the plants require a rich,

loamy soil, and the best is well drained grass land, laid out in terraces about 10 feet wide; this must be dug over and allowed to lay exposed to the sun for about two months, then drilled and manured and planted with potatoes. These must be lifted and the jalap tubers planted in rows a few inches high to prevent the water from becoming stagnant around them; when the plants have become established, ordinary culture is all that is necessary.

Planted in this way 1 acre has yielded 5,000 pounds of green tubers at the end of three years; these, properly dried, produced 1,000 pounds of jalap powder. A trial was made in this way some few years ago. Five acres of land were thus planted; the crop yielded 8,000 pounds of green tubers, producing 1,077 pounds of cured jalap.

The drug is imported from Vera Cruz, and altogether about 180,000 pounds finds its way into our English markets. So it will be seen that it is an article of some commercial importance.

#### The Ovaries and the Determination of Sex.

Some interesting observations have recently been made by Seligson upon the relation which the ovaries bear to the determination of sex. His theory is that ova from the right ovary develop into males, those from the left into females. Experimenting upon rabbits he found that when the right ovary had been removed only female young were born, while when the left ovary had been extirpated only male young were brought forth. But he further draws attention to another fact. He states that in all the cases of tubal pregnancy of which he could obtain notes, where the sex of the foetus was given, 19 in all, those of the right side were without exception males, and those of the left females. These data certainly seem to add weight to his argument, and, moreover, are of great interest. If the author's observations in this regard are confirmed by subsequent inquiries the debated question of what the laws are which govern the determination of the sex of the foetus will have been advanced a stage toward its solution. But, of course, many and repeated investigations and experiments will have to be undertaken and recorded before the evidence upon this point raised by the author's conclusions could be regarded as worthy of acceptance from a scientific standpoint.

#### A New Solvent for Resins.

The organic compound known as dichlorhydrin has recently been found by Fleming to possess the property of dissolving all resins. Amber and the various copals all dissolve easily. This new solvent, if it can be produced cheaply enough, affords a way of dissolving up all the splinters of resin and amber turnings as well as large pieces. So strong is the solvent power of dichlorhydrin that it soon shows its property in destroying stoppers, either of cork or rubber. The compound seems to be capable of wide technical application. Unfortunately its production still presents difficulties, so that it is doubtful the product can be made at a low price. But experience shows that when a substance is demanded by industry it will soon be produced at a price which allows of its use.

\* The British and Colonial Druggist.



**More About the New Photography.**

Professor Geissler, of Bonn, has been experimenting with a view to utilizing the fluorescent effects of Röntgen's rays. He smeared a piece of paper with various substances, laid it on the dry plate, and exposed it to the rays. He has already found that chloride of iron, nitrate of uranium, and extract of cuba wood have the desired effect. He then steeped the dry plate itself in chloride of iron, and thus succeeded in further abbreviating the process. Systematic experimenting in this manner, he thinks, will be the best way of finding the fittest substances for expediting the process. Professor Geissler also points out that ordinary rays are just as little broken by the eyes of insects as are Röntgen's rays in the new photography, and he suggests that, as the eyes of insects can very easily be artificially imitated, such imitations may, perhaps, prove of use in the production of sharper outlines in the objects photographed by the new rays. A member of the Photographic Club, at Crefeld, has found that the time of exposure is shortened exactly by one-half by heating the plate. He heated it up to about 40 degrees C. (or 104 degrees F.), and the process then occupied only 15 instead of 30 minutes. This effect, it is conjectured, is probably due to the enhancement of the fluorescence by heating, and cannot fail to be of great use in the case of small apparatus.

Further experiments have also been made with the Röntgen X rays in the Military Academy of Berlin in the presence of several generals, officers and physicians. The object was to show that by means of photographing with these rays

**REAL PEARLS COULD BE DISTINGUISHED FROM FALSE.**

For this purpose a piece of jewelry was photographed, which was composed partly of real and partly of false pearls, the latter being, however, excellent imitations. After it had been exposed to the rays for three-quarters of an hour, the difference between the two was clearly to be seen. The real pearls were shown as dark opaque masses, but the imitations were transparent, and, above all things, clearly

**SHOWED THE BAR**

with which they were attached to the ornament. In order to establish what sorts of wood the Röntgen rays penetrate best, common pine, alder, mahogany and walnut were chosen for the experiments. Even the fine grain of the woods was reproduced by the rays. This justifies the hope that later on it will be possible to

**REPRODUCE HUMAN AND OTHER ANIMAL TISSUES.**

It appears that the rays pass best through pinewood, but that the dark stripes of resin have a disturbing effect. Consequently, alder is to be preferred for making the boxes for the experiments. Mahogany is less penetrable. A professor at the Chemical Laboratory at Budapest University has, it is reported, invented an improvement of the Crookes tube which enables one to make photographs with Dr. Röntgen's X rays in two or three seconds.

**Artificial Wintergreen Oil.**

Thayer gives the following practical method (*Amer. Journ. Pharm.*) of applying the hydrochloric acid process for the manufacture of synthetic wintergreen oil: Take 505.47 gm. of salicylic acid and 690.85 gm. of methyl alcohol (sp. gr. 0.820); place the alcohol in a wide-mouthed flask and add portions of the acid until a saturated solution is obtained.

Make the additions slowly, as all of it will not dissolve. Connect the flask with an upright condenser and heat it on a water bath until the contents are brought to the boiling point, then pass dry hydrochloric acid gas into the hot solution until the latter is saturated. Then add about 10 gm. more of the salicylic acid, again saturate the solution with hydrochloric acid and repeat the operation until all the salicylic acid has been added, the passage of the hydrochloric acid gas being continued for two hours after the last addition of the acid. It is necessary that the gas be thoroughly dried by being passed first over anhydrous calcium chloride, then through three bottles of sulphuric acid, before being conducted into the salicylic acid solution.

The lower oily layer, which separates, is washed with water until no longer acid to litmus, then distilled from a flask by the aid of live steam, the distillate is freed from excess of water by the use of a separating funnel, and finally dried thoroughly over anhydrous calcium chloride. The product thus obtained is of a slightly yellowish color, has an agreeable odor, and costs 90 cents to \$1 per pound, the above quantities yielding 500 gm. of methyl salicylate. Ethyl salicylate, which has a more delicate odor, and a lighter specific gravity, can be prepared in the same way.

**The Koumiss of the Caucasus.**

The Caucasians designate under the name of "Kephyr" an acidulous beverage, lightly alcoholic, prepared by the action of a special ferment, known as "Grains of Kephyr," on milk. These grains are small yellowish-white masses, compact, elastic; when fresh they have a cartilaginous consistence; when dry they become hard, more friable, of a dirty yellow color, translucent (somewhat resembling tapioca or sago). They vary in size from a nut to a pinhead, and their surface is irregular and bosselated. Placed in water they smell somewhat, become softer and of a whitish color.

The zoöglea incloses two species of bacteria and a yeast, the latter probably identical with the yeast of beer (the *Saccharomyces cerevisiae*). One of these bacteria is in short, immobile rods—the lactic ferment of Pasteur (*Bacillus lacticus*); the other consists of long bacilli, slowly motile, often showing slight enlargements at their extremities—this, the *Bacillus caucasicus*, is special. The part played by these different bodies is for each most distinct. The *Bacillus lacticus* secretes a rennet which coagulates the casein of the milk, a process necessary to its ulterior transformation; it also furnishes a special *diastase*, which changes the lactose into maltose by a process of hydration, thus fitting it to undergo the alcoholic fermentation through the action of the yeast. The *Bacillus caucasicus*, through the medium

of a *casease* which is secreted, dissolves the precipitated casein, transforming it into an albuminose.

The milk, at first opaque and holding in suspension flocculi of the precipitated casein, is now transformed into a transparent liquid, rich in peptones, slightly acid, and containing considerable carbonic dioxide and some alcohol, these last being produced by the yeast on the saccharine matter of the milk.—From the French in the *Therapeutic Gazette*.

**Correspondence.****The New Jersey Board of Pharmacy.****EDITOR AMERICAN DRUGGIST:**

Sir—I have been informed that the present State Pharmacy Board of New Jersey is acting officially under the old law, and that the members are "holdovers," because new members had not been appointed.

I would therefore like to have the opinions of other pharmacists of the State in regard to the legality of the actions of the board since last spring.

As a graduate in pharmacy, as a drug clerk, and as a member of the New Jersey Pharmaceutical Association, I assume the right to inquire if the present doings of the board of this State are lawful, and what position would a recently registered person occupy if the action of the board proves to be unlawful?

The present board was appointed under the law of 1886, which act declared that the members of the board should hold office until their successors were appointed; but does not the law of 1895 declare that, "This act shall be a public act, and shall take effect immediately," and that "all acts and parts of acts conflicting or inconsistent herewith be and the same are hereby repealed"?

Therefore, were not the present members of the board legislated out of office by the new law, since clauses in the law of 1895 did not exist in the old law in regard to their duties and fees for examination?

Governor Werts failed to appoint five men from the fifteen which were appointed by the N. J. P. A., as the law required.

Is there then any Board of Pharmacy in this State?

A member informed me that they were holdovers under the old law yet. They hold meetings in Trenton, according to the new law, which specifies where and when they shall hold such meetings. They examine applicants for assistants or full-fledged pharmacists, charging \$5 and \$10, respectively, while the old law was \$5.

Permit me also to ask the pharmacists of the State if they indorse the Alpers curriculum?

I understand that 19 of the applicants at the last meeting of the board were persons who had failed once before the same board. Was that because of the new curriculum laid before the last meeting of the N. J. P. A.?

Hoping this may lead to my securing the desired information through your beneficial journal,

LEWIS W. BROWN, Ph.G.

MADISON, N. J., February 8, 1896.



We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of any unusual compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the labels used on packages of the compound should also be sent.

**Soluble Extract of Ginger.**—P. S.—The following formula is much esteemed by manufacturers:

Tincture of ginger, U. S. P.	1 pint
Tincture of capsicum	3 drams
Oil of ginger	2 drams
Water, enough to make	2 pints
Magnesium carbonate	4 drams

Rub the oil with the magnesia and add the tinctures; add about 14 ounces of water in divided portions, stirring vigorously the while. Transfer the mixture to a bottle and allow to stand one week, shaking frequently, then filter and make up to 2 pints with water.

**Japanese Cachous.**—G. W. B.—The fancifully named article which you inquire about has a composition resembling the following:

Ext. glycyrrhiza	Parts.
Water	100
Acacia, powdered	100
Liquorice juice	30
Cascarilla, powdered	30
Charcoal, powdered	2
Orris, powdered	2
Oil of peppermint	5 drops

Dissolve the extract of glycyrrhiza in the water and to the liquor add the powdered acacia and liquorice juice. Evaporate the mixture thus formed over a water bath to the consistence of an extract. When of the proper consistence incorporate the remaining ingredients. Roll out the mass on an oiled slab and cut into squares of a suitable size.

**Books for the Study of Pharmacy.**—W. A. S.—We have published several lists of the kind desired during the past year and must refer you to back numbers of the journal.

**Red Lights.**—W. L. E.—The following formulas will furnish compounds such as are used to produce red fires for stage purposes:

I	Ounces.
Strontium nitrate	8
Potass. chlorate	2
Shellac, coarsely ground	2
II	
Strontium nitrate	10
Potass. chlorate	1
Charcoal	1
Shellac, coarsely ground	1

All the articles must be free from moisture, and should be dried and made into granular form separately with the shellac in coarser powder than the rest of the in-

gredients. The mixing is best done on heavy paper, using a wooden spatula or wooden tools.

**Purified Petroleum.**—H. B. R. writes: "Please inform me what is meant by and where I can obtain some purified petroleum for use in preparing an emulsion with hypophosphites."

Fluid petrolatum is what is meant here, and this can be obtained through any wholesale druggist. It is official in the Pharmacopoeia under the title liquid petrolatum. The refined article is sold under a number of fancy names, "Liquid Albolene" for example.

**Staley's Eczema Lotion.**—H. B. R. asks us to complete the following formula:

	Grains.
Calomel	33
Acid. nitric dil.	ss
Acid. muriatic dil.	ss
Acid. pyroligneous	
Glycerin	
Chaulmoogra oil	

He adds: "The product is said to be a 'dead shot' in eczema and forms a light reddish liquid to be used diluted one-half with water."

We do not place the preparation, and regret our inability to assist our correspondent.

**Malted Cod Liver Oil Emulsion.**—J. T. M.—The following is accounted an excellent formula for the preparation named:

#### MALTED COD LIVER OIL EMULSION.

Cod liver oil	8 ounces
Extract of malt	8 ounces
Yelks of egg	two
Tragacanth gum, powdered	16 grains
Hot water	1 dram
Essence of lemon	10 minims
Essence of bitter almond	10 minims

Weigh the extract in a  $\frac{1}{2}$ -pint graduate and add the warm water to thin it, stirring quickly. Beat up the two yelks in a mortar with the powdered tragacanth and add the oil and extract alternately, lastly the flavoring essences, which may be varied to suit the taste.

**Wild Cherry Phosphate.**—L. S.—A very palatable soda water syrup of this kind can be prepared as follows:

German black cherry juice	4 ounces
Glycerin	1 ounce
Alcohol	3 ounces
Phosphoric acid, dilute	2 drams
Water, enough to make	1 pint

Mix and add 1 ounce or more to each pint of simple syrup used.

**Elixir Viburni Comp.**—A. R.—The formula in use at the New York Hospital in a modified form reads as follows:

Ext. viburni fluid	320 minims
Ext. piscid. erythrin	180 minims
Hydrastin, sulph.	3 grains
Elixir adjuvan. N. F., to make	4 ounces

Dose, one teaspoonful.

**Elixir Ferri, Quinin et Strych. Phos.**—A. A. L.—Of the numerous formulas which have been published from time to time the following is said to produce the nearest approximation to the one asked for. Proceed as follows:

Iron phosphate, scales	256 grains
Quinine hydrochlorate	128 grains
Strychnine sulphate	2 grains
Glycosine or saccharin	24 grains
Potassium citrate	32 grains
Alcohol	4 fl. ounces
Glycerin	6 fl. ounces
Hot water	6 fl. ounces
Water of ammonia	40 minims

Dissolve the strychnine and afterward the quinine in the alcohol; then add the glycerin. Dissolve the iron and the potassium citrate in the hot water. Rub up saccharine with the ammonia water and to this add the iron and potassium solution and mix with the alcoholic solution of the alkaloids.

The makers of Freligh's Tonic do not, as we understand it, make any secret of the composition of their preparation, and particulars can be obtained on demand. We should not advise you to market a substitute preparation of the article, and when Freligh's Tonic is asked for the original compound should always be dispensed.

**Keeley's Liquor Cure.**—H. M. F.—G. E. W.—Particulars regarding this compound can be obtained by consulting previous issues of this journal.

**Melachol.**—The makers of this article state that every fluid dram contains 85 grains of combined sodium phosphate, citric acid and sodium nitrate. This is the extent of our information on the subject.

**Preparation of H<sub>2</sub>O<sub>2</sub>.**—C. S.—The official process in the United States Pharmacopoeia furnishes a solution which is the equal of any proprietary preparation. The article which you inquire about (Pyrazone) is undoubtedly prepared after a similar process.

**An Incompatible Dentifrice Formula.**—D. writes: "Please inform me how I may prepare the accompanying formula so that the compound will not precipitate. I have made it up in different ways, sometimes letting it stand for three months, then siphoning it off and letting it stand again, but a precipitate still forms. The formula is:

Oil gaultheria	16 ounces
Oil cassia	10 ounces
Oil peppermint	4 ounces
Oil cloves	4 ounces
Alcohol	14 pint
Water	14 pints
Castile soap	27 ounces
Granulated sugar	24 ounces

We should say the trouble is with the sugar. If you will substitute saccharine or glycosine in suitable proportions, say 40 to 60 grains, for the sugar a clear solution will result. The proportion of oils to alcohol seems a trifle in excess, and you may either have to decrease the amount of these or make the compound stronger in alcohol.

**Recognition of Diplomas.**—W. G. E.—The Missouri Board of Pharmacy recognizes no diplomas except their own. Graduates of pharmaceutical colleges are required to pass the examination of the board if they wish to conduct a pharmacy in Missouri.



## Advertising Aid, how, when, and where to Advertise.

PRACTICAL HINTS AND SUGGESTIONS. CRITICISM AND CONSTRUCTION  
OF ADVERTISEMENTS.

In Charge of Ulysses G. Manning

The department editor will be pleased to criticize any advertisements submitted and to suggest improvements. Questions answered and advice given. Our readers are cordially invited to avail themselves of this help.

### ADVERTISING FOR WOMEN.

IT is well for advertisers to remember that two-thirds of everything in the merchandise line is bought by women. Women not only do the buying for the home, for themselves and for their children, but frequently have much to say in the selection of articles used exclusively by the sterner sex. We sometimes find clothiers and dealers in men's furnishing goods, attempting to reach men through ads that appeal directly to the women; and it is good advertising, for the man uninfluenced by woman is yet to be born. Nathaniel Fowler, Jr., one of the few advertising experts says: "I have made several experiments, and without exception the results have proven that to reach man you must cater to the woman; to reach woman you must cater to woman. You must cater to woman anyway, and comparatively little to man, for man can be reached through woman, but woman can never be reached through man."

Women, as a rule, have more time to read than men; they read papers more carefully. They find an element of news in ads that men overlook. They are less skeptical and more easily influenced than men. Their trade once secured is of a permanent character, and, best of all, women are splendid advertisers. A man might trade with you a dozen years and never say a good word for you, but a woman never. If she forms a liking for your store she is going to say something about it. Winning her favor is winning her influence, and that is no small thing.

Most of the wants supplied by drug stores are of a household nature, therefore whenever possible appeal to the ladies.

### Criticism and Comment.

MALDEN, MASS.

U. G. MANNING.

DEAR SIR—I have taken a great deal of interest in your department, and have at various times adopted some of your suggestions. As you are willing to pass judgment on ads, I send two for criticism. I change often and think a small ad, to the point, pays about as well as a large one. I am near the post-office, and a few years ago paced off the distance and found it about 37½ steps. I have used this to locate my place of business, and I must say that it has been the best ad I ever struck. I think some such oddity is a good scheme.

C. A. CHARLES.

Mr. Charles' ads are about two inches single column; they are fairly good, but are poorly displayed. In all his printed matter, Mr. Charles has this line:

87½ STEPS WEST OF P. O.

This is very good—especially the half-step. I have, no doubt, that this clever line has stuck in the memory of a majority of those who have read it, and that many a Malden citizen has, almost unconsciously, stepped off the distance, and can certify to the accuracy of the figures. Any quaint, unusual or striking phrase associated with an advertiser's name helps to fix the name in the mind of the public. If the phrase gives information as to your business or location so much the better.

The paper Mr. Charles uses is black with heavy displayed lines. His ads look like all the rest. I suggest that a little more actual information be given on the preparations advertised. Try the effect of setting with a single bold headline followed by a small, solid paragraph of reading matter. Use not over 35 words in the paragraph; have it set in the ordinary body type of the paper; set about one and one-half inches wide, and have your name follow in type about half as large as that used in the headline. It will pay to have the "87½ step" line engraved, using some distinctive letter. The same phrase constantly appearing in your advertising will be all the more valuable, if it always looks the same.

In the two ads and a label sent me, Mr. Charles appears as a druggist, pharmacist and apothecary. I always advise sticking to one title in advertising. Drill

your name and profession into the public until they become inseparable. The task will be easier if the combination of words is never altered.

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HORNELLSVILLE, N. Y.

MR. U. G. MANNING.

DEAR SIR—I have the pleasure of inclosing under separate cover, two copies of the *Daily Times* containing my ad, which I wish you to criticize. I admit that the press work is poor in one; and I wish they were able to furnish a heavier border; but outside of this would you think the ads would do good work. I beg to thank you for your progressive business hints, found in America's only drug journal; hints which I take great interest in and try to profit by.

HORACE G. PIERSON.

Your advertising is all right, and I am sure will bring business if you keep persistently at it. Your display is good, and the ads are well written. The one on Hot Water Bottles would have been strengthened by a price or two. You ought to see results from your Cough Stop advertising if ads are frequently changed, and you keep them going for two or three weeks. A heavier border would be advisable, and I suggest that you buy one for your own use. These ads are reproduced on the following page. The original form was 2½ inches double column with border.

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BE ORIGINAL.

Frank H. Synder, Mahanoy City, Pa., sends his "Koff Kure" circular for criticism. The fault of your circular is that it is too much like too many others. It lacks originality, attractiveness, and, most of all, lacks argument. I fancy that the first cough cure circular stated that the remedy was "a safe, sure, and reliable cure for coughs, colds, hoarseness, bronchitis, and all diseases of the throat and lungs." "It has cured when others failed," and "has cured others, will cure you" are better, but all this has been worn threadbare by repetition. A circular ought to tell just what people want to know. It ought to be specific.

If the preparation is in any way different or better than the ordinary run of cough remedies, the circular ought to tell how and why it is different and better. Were you to hear a competitor stating that your preparation "didn't amount to much," you would probably fire up, and in 60 seconds give about 15 good reasons why it was better than any other. Your remarks on such an occasion—leaving out the exclamation points—would be what are needed to make this a good circular.

The circular is well printed on good paper, but I do not fancy these semi-poster sizes. As a counter wrapper it is all right, but for the legitimate purposes of a circular it would be more effective if you made a four page folder of it. The testimonials are good, and atone, in a measure, for the lack of argument elsewhere.

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BE SPECIFIC. DON'T SPREAD TOO MUCH.

Dr. J. A. Miller, Harrisburg, Pa., distributes a small circular enclosed in an envelope, which also bears an ad. Cuts are employed on both circular and envelope. The talks are on the business in general, with several specialties woven in. It is apt to be read, and will do some good. All these things would be better, however, if they did not cover so much ground. It is better to take up one topic at a time and issue circulars often.

## AN EYE-CATCHING ADVERTISEMENT.

H. H. Hay & Son, Portland, Me., recently forwarded an eye-catching ad. They use a single column space with border. They had set, clear around the ad next to the border, these sentences: "Kindly return to us any purchase that is not satisfactory, and receive your money back. It is our endeavor to sell you only what you want. H. H. Hay & Son." The entire middle portion of the space was left blank. The effect was, of course, striking, and doubtless enabled Messrs. Hay to forcibly drive home a reminder of a very excellent business method. Such advertising is good, if not indulged in so frequently as to lose its force.

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## A DAINY BOOKLET IN THE "POWERS" STYLE.

EASTHAMPTON, MASS.

MR. U. G. MANNING.

DEAR SIR—We inclose for your criticism a booklet which we issued last season. We expect to put out another one this spring, and if you will kindly mention, in the AMERICAN DRUGGIST, our failing in the inclosed we would be greatly obliged.

Yours very truly,  
J. A. LOOMIS & SON

This is a dainty little booklet of eight pages and cover; size about 8 x 4½

# Cough Stop

Doesn't clear the conscience, but it will clear the throat and lungs. It is pleasant to take—it touches the spot—it is safe and quick.

## 20 Doses 10 Cents.

### Horace G. Pierson, DRUGGIST,

Main St. - Canisteo St.

inches. I don't want to pick flaws in it; I want to praise it. Whoever wrote this can do as well again, and, doing as well, he will do well enough. Before I had read two pages, I said "J. E. Powers." If Messrs. Loomis are themselves the authors, I can pay them no higher compliment than is conveyed in the above suspicion as to its origin. The booklet is in the style of this well-known writer, and is well-nigh perfect, both in matter and

in the artistic simplicity of the printing. The cover bears this title: "Ice Cold Facts." Then follows a little talk on soda water, information as to the quality of service afforded, the beverages served, ice cream soda, crushed fruits, ending with a page or two of "other matters"—a reference to their stock in general.

A druggist who puts out so excellent a piece of printed matter as this can feel absolutely certain that it will pay. No one is going to overlook it, destroy it, or fail to read it. If a suggestion for this year's booklet is wanted, I would offer this: Enter a little more into the details of good soda-water making. Tell where in the art lies, and attempt to clinch the trade by educating people up to your standard—make competent judges of them.

### Retail Advertising.

BERLIN, N. H., January 23, 1896.

Mr. Charles Austin Bates, New York City:

DEAR SIR—I have been talking with a retail druggist about his advertising. He claims that it does not pay a druggist to advertise—unless, perhaps, he advertises a preparation of his own make or some leader. He mentioned several large druggists in Boston that do not advertise. He claims to know what he is talking about, having been connected with several large concerns that have done a large amount of advertising. I was not sufficiently well-posted to cite cases (which he asked me to do) where druggists had been benefited by advertising, but I think there must be such cases. I am one of the many who are of the opinion that if anybody understands advertising, its Charles Austin Bates, and I have written you this letter in hopes that some time you will say something about retail druggists' advertising in your department of *Printers' Ink*.

Very truly yours,

E. J. BARNEY.

I do not see why a retail druggist should not advertise preparations of his own, if he has anything that is worth advertising. I do not see that that has anything in particular to do with the case. Just what methods a man shall pursue in his advertising does not amount to very much so long as the advertising pays. A druggist may make a specialty of anything he pleases, whether it is selling soda water or filling prescriptions, or making a substitute for "Scott's Emulsion."

## A CUTTER'S SUCCESS.

When I first read this letter I was going to cite the case of W. I. Boreman, of Parkersburg, W. Va., who attributes his very gratifying success to the good advertising he has done, and then I happened to remember that Mr. Boreman does have several preparations of his own, which he advertises along with other things. Boreman, however, is a cutter. That is to say, he runs his business on business principles, buys his goods at the lowest price he can get for the right sort of stuff, and sells them at a reasonable advance. Because he is smart enough to do this, and to get more trade than his slower brethren, he is dubbed a "cutter," and is frowned upon accordingly. I can understand why the old-fashioned pharmacist, who regards himself as a dignified and unapproachable professional man, would feel the utmost disgust to see his trade going to the wicked cutter. That's what is happening wherever there is a cutter pitted against a pharmacist, and I am inclined to think that the chances are in favor of the cutter being a better pharmacist than the pharmacist. If he is not he can hire a pharmacist. There are plenty of really good prescription compounders who haven't a grain of business sense and could not run a peanut stand profitably.

They are all right when they are fitted into the proper niche, but they ought not to try to run a drug store.

## THE TENDENCY OF THE TIMES

may be altogether wrong. I have nothing to do with that. I take the facts as I find them, and every wise business man does the same thing. There is no use bucking against a fact. If the drug business can be made successful by cutting, and if it is going to dwindle without cutting, then for goodness sake get out the axe. There is no use sitting still and saying that just because you are right you are going to everlasting smash on principle. The pharmacist may be right and the cutter may be wrong, but if the pharmacist sticks to it long enough he will starve to death. The editor of one of the drug trade journals told me once that it did not pay to advertise a drug store, and he said he knew, too. He said that he had had a beautiful drug store in Nashville, Tenn.—a better drug store than there was any place around in his neighborhood, and he didn't advertise it. And he failed. That's the way he knew advertising didn't pay. That sounds like fabrication, but it is an absolute fact.

## These Cold Nights

You will sleep the sleep of the just and not wear that weary look in the morning if you take to bed with you one of our all rubber

### ...HOT WATER BOTTLES...

If you have a stiff neck, or pain in the back or side, lie on the bottle—if it bursts we will give you a new one. Goodyear Rubber Company made them and we know they are right and well worth more than we ask for them.

### HORACE G. PIERSON'S Prescription Pharmacies.

That is what the man said to me. That is the reason he gave me for believing that advertising did not pay. He was a pharmacist. He had no use for the commercial druggist. He had the idea that druggists ought to be professional men, chemists and things like that, and that they ought to drop all the profitable side lines and give up all the 150 per cent. profits that they make on Sundays, devoting their whole time and attention to

compounding prescriptions, on which they would make all the way from 200 to 1,000 per cent., according to how they felt on that particular day.

I do not mean to say that the ability to compound a prescription accurately is not a very valuable accomplishment. Of course, in so far, the drug business is a professional business. If the doctor cannot have intelligent attention for his prescriptions, it will do him very little good to write them, and it is often the case that human lives hang in the balance when a prescription is being filled. A careless or incompetent prescription clerk can do more damage than he is worth. The position is a responsible one, and should be filled intelligently and conscientiously, but that need not prevent the head of the concern being a business man.

I cannot see any difference between the general drug business as it is now conducted and any other retail mercantile business. The druggist supplies the daily needs of the people. I do not know how it is with other people, but I know that 99 per cent. of my drug bills is not for the filling of prescriptions. It is astonishing how many things you can buy in a drug store without buying drugs. These things are merchandise. Prescriptions are not merchandise. I would be afraid to have the price of my prescription cut, but I am very glad when I can get some standard patent medicine, or a toilet article at less than the manufacturer's list price. If I were a druggist, I would advertise high prices on prescriptions and low prices on other things. It requires skill to compound a prescription, and the skill ought to be paid for. I would rather have two cents' worth of medicine and a dollar's worth of skill in a prescription than to have a dollar's worth of medicine and two cents' worth of skill.

I am afraid I am talking more about the drug business than I am about advertising it. The long and short of the advertising question is that it will certainly pay to advertise a drug business, just as it pays to advertise every other business. There is no reason in the world why it should not. Once let people understand what advertising really is, and there will be a lot less nonsense about it. There is no mystery about it. It is simply telling people where they can get what they want, or what they think they want. That is all there is of it. There are many ways of conveying this information, and there are many cases which make given articles desirable. A very superior excellence of quality, or a very exceedingly low price, or both, may make a thing desirable. Sometimes an article is desirable because it is convenient, and a good many drug stores in New York owe much of their patronage to their convenience. We all know that we can go down to Macy's and get a cake of Cuticura soap for 11 cents, but it would cost us 10 cents car fare, and take us two hours to go there and back and we can get the soap right around the corner, or generally right on the corner, for 20 or 25 cents. I believe that even the local corner drug stores in New York could be advertised profitably. There is certainly a great difference among them, and a great difference in the amount of trade that two stores transact in the same neighborhood. I have in mind two drug stores within two blocks of each other in a good neighborhood on Columbus avenue. The one which has been longest established, and which ought to do the

most trade, is a sleepy looking sort of place that I should think did only half or one-fourth the business that the other one does. The only advertising in either case is the attractive appearance of one store, the courteous attention accorded to customers, and the adequate display of goods. Anybody who knows the two stores and the difference between them will certainly go to the more attractive place.

One man may tell another, and that is advertising. However, the news is diffused, it is still advertising. If a man sees from the outside that a drug store is a likely looking place, he will go there in preference to the dingy store down the street. This information can be conveyed in the right sort of advertising. It can be given to people who only pass the store. The more widely the knowledge is distributed, the more the trade will grow. Any good store will stand good advertising, no matter whether the store sells dry goods, or liquors, or cigars, or drugs. No store can succeed without advertising of some kind. Do not misunderstand me. Advertising is not necessarily printed words in the paper. It is not necessarily the distribution of circulars, or the painting of signs, or the posting of bills. The advertising may be done in the store itself, and this is the best of all advertising. If it isn't done, all the other advertising is discounted. Advertising may be gained by the proprietor's large circle of acquaintances. When two men are introduced, the chances are that each will find out the business of the other before they part. If they do not, the friend who introduced them will be asked what business each is in. That is one of the first things one man wants to know about another. It seems easier to take a man's measure when you know what business he is in. You can classify him better.

I want to say again that no business can succeed without advertising of some sort, and the better the advertising, the greater the success.

It does pay to advertise a retail drug store.—*Printers' Ink.*

#### A Microscope as an Advertising Attraction.

F. W. E. Stedem, who is a prominent member of the Apothecaries' Company of Philadelphia and of the Philadelphia College of Pharmacy, is a successful business man as well as a good pharmacist. He recently said apropos of advertising: "For several years past I have been thinking, now and then, of putting a strong microscope in my store, for the interest that my customers would take in it. I hesitated for a long time, for fear that meddlers would try to tinker with it, and it was with many misgivings that I placed my next best instrument in the window, protected only by a sign, 'Look, but please do not touch.' It remained there for two months, and in all that time only one person, of all the hundreds who used it, put a finger on the adjustment. I took up the ordinary housefly first, and week by week showed legs, feet, head, wings and body. The display caused a great deal of interest, and, as the instrument was better than ordinary, school children and adults came into the store for the express purpose of peeping into it. I am making slides of other common house insects—fleas and red ants—and will display them in my better instrument. I put a sign on the table tell-

ing what part of the insect is shown on the slide, and asking visitors not to handle the microscope, and the thing is safe without any other precaution."

#### The Value of Confidence.

The following, from *The Retail Druggist*, presents a lesson which speaks for itself, it adds:

A correspondent writes us that while he was stopping at a hotel in the northern part of the State one evening, he overheard a conversation between two agents who had met after two years' separation. One said to the other: "Come and take a drink." "No," said his friend, "not for \$100 would I." "Why, you used to drink." "Yes, but let me explain. Two years ago I engaged with a Buffalo house to travel for them. They packed my grip with samples and gave me \$50 for expense money. I started for Scranton, Pa., and was gone two weeks, staying there all the time on a drunken spree. The \$50 was all gone, and I had not sent in any orders, so was obliged to borrow money enough to get back to Buffalo.

"I went into the office Saturday, delivered the samples, and said to the proprietor: 'I am done traveling.' 'But,' said the merchant, 'where have you been? We have not heard from you. What have you been doing?' I replied that I had been drunk, had spent all the money and borrowed some to bring me back. 'Now, go home, sober up and come here Monday morning,' he replied. I went down to the office Monday sober; he handed me \$50 and the sample case, and said: 'Go and make a man of yourself.' I thought if he had that confidence in me, I ought to have as much in myself, so started out and have been on the road ever since. I now own a home, and have a wife and baby. You can rest assured I have not taken a drop since and you could not induce me to drink."

#### Caring for Stock.

"There is a lesson for retail druggists right there," said a wholesaler recently as he pointed to four or five bottles of proprietary articles on a desk near him. "Every one of these bottles has on it an Internal Revenue stamp, which shows that it was purchased either before, during or immediately after the war. That stock comes from a druggist who has just failed, and every druggist ought to fail who, like him, kept no better care of his stock than to allow it to deteriorate, so far as the packages were concerned. Those are staple goods. Look at the condition of the containers. He allowed them to go to ruin with dust and dirt, and evidently sent for fresh stock while they were on the shelves. The drugs themselves are probably as good as when they were first put up, but they are worthless and can't be exchanged, simply because of their appearance."

Again the intelligent coroner's jury. A photographer killed himself by taking cyanide of potassium, and at the inquest the jury found that "the deceased died from poisoning, but for what purpose the poison was taken there was not sufficient evidence to show." This asinine assemblage of good men and true is apparently under the impression that cyanide of potassium is taken as a pick me up, or in the way of a friendly drink with a companion.—*London Sun.*





## NEWS OF THE FORTNIGHT.

### Grocers and the Pharmacy Law.

The Pennsylvania Board of Pharmacy has been stirring up the grocers of Pittsburgh and Allegheny City, but has not found such a widespread violation of the pharmacy law as that reported by President Cameron in Brooklyn. Further thrilling details of President Cameron's tour of inspection came to light during the meeting reported on page 141, including his escape from the cleaver of a butcher-druggist. The New York State Board is also after the grocers (p. 186), while the New Jersey Board has made a mild effort in that direction (p. 185). In Michigan also (p. 184) the board has been after grocers as well as after unregistered pharmacists.

### Pure Food Prosecutions.

The Ohio commissioner keeps up his attentions to the drug trade and finds (p. 185) that the druggists will fight.

### Legislation.

The opposition to the proposed changes in the Massachusetts pharmacy law seems to gain strength, and many and vigorous protests have been lodged. The board, however (p. 185), still feels confident of carrying its point, and has at last won the support of the total abstinence element.

The Kentucky pharmacists also are moving for a revision of the pharmacy law (p. 185).

### Prices and Cutters.

The St. Louis trade seems to be "about" to do something to the cutters (p. 186). It is to be hoped that the results will be more satisfactory than those heretofore attained.

The advance in the jobbing prices of several of the staple proprietaries is attracting considerable attention (p. 186) and much unfavorable comment, as in the meeting of the Apothecaries' Guild in Boston, which is reported on page 142.

At the hearing before the sub-committee of the Committee on Ways and Means the retail drug trade was not represented at all. The manufacturing pharmacists and the perfumers were ably represented.

## Enforcing the Law in Michigan.

MR. EWING DEVOTES THREE WEEKS TO A TOUR OF THE STATE—FINES IMPOSED RIGHT AND LEFT—A GENERAL MERCHANT PAYS UP—STRICT LINES TO BE DRAWN.

DETROIT, MICH., February 17.—Hon. A. E. Ewing, Attorney for the State Board of Pharmacy, recently returned from Grand Rapids, from a three weeks' trip through the State, during which time he made it particularly hot for unregistered druggists and clerks. Mr. Ewing, however, says that he didn't get them all, and that unless they take warning from the examples he made more scalps will shortly be hanging at his belt. He visited Owosso, Downingtown, Minden City, Seney, Grand Marais, Marquette, Ipheming and Ontonagon. Several arrests were made, and in each instance a conviction was secured, resulting in fines ranging from \$10 to \$25. In every instance the erring druggist pleaded guilty and saved the costs of the trial. At Minden City Dr. McNaughton and Dr. Totten were hauled over the coals because they were unregistered and employed no registered help. Both coughed up \$10 apiece.

At Laingsburg Frank Allyn, an unregistered clerk, was taken to Owosso and fined \$25 and costs. Burt Carmichael of Ontonagon was soaked \$10 for the same offense. Arthur Desjardin of Marquette and Dr. Tetter of Grand Marais, ditto. W. W. Hargreave, a general merchant at Seney, handled a stock of drugs in connection with his other business without being registered. It cost him \$10 and costs of the trial. Hargreave was so disgusted with his experience he packed up his stock of pills, etc., and shipped them off on the next train. Attorney Ewing says he suspects that there are other general merchants, especially in Northern Michigan, who are handling drugs and poisons and dispensing them without the knowledge which is required by law. It will be remembered that Mr. Ewing recently clarified the atmosphere in Detroit, and the courts reaped a goodly harvest of fines as a result. The State Board of Pharmacy is doing everything in its power to enforce existing laws.

## The New Jersey Board After the Grocers.

On January 29 Wm. C. Alpers, secretary of the New Jersey Board of Pharmacy, was sent by the board to Paterson to visit the Paterson pharmacists and ascertain their views on the present law

and the actions of the board. He visited nearly every pharmacist in Paterson, as far as time allowed, was cordially received by all of them, and with the exception of one they all were well pleased with the present state of affairs and expressed their approval. The one exception was a doctor of medicine who conducts a pharmacy in violation of the law without registration, and his objection to a strict examination can easily be explained.

The majority of Paterson pharmacists, however, complained that many grocers and other dealers daily violate the law in selling poisonous articles, without any knowledge of the dangerous nature of such drugs, and urged him to induce the Board of Pharmacy to stop such illegal practices. Mr. Alpers has laid the matter before the board, and unless the violators desist action will soon be taken against them. The law enumerates the articles that can only be sold by registered pharmacists as follows:

Arsenic and its compounds or chemical derivatives; corrosive sublimate and other poisonous derivatives of mercury; phosphorus and its poisonous derivatives; prussic acid and its poisonous derivatives; tartrate of antimony; essential oil of bitter almonds; oils of tansy, savin or croton, chloroform, chloral hydrate, aconite, belladonna, conium, cantharides, digitalis, hyocyanus, nux vomica, Indian hemp, veratrum viride, yellow jessamine, opium, their alkaloids or other preparations (except paregoric and other preparations of opium having less than two grains to the ounce); ergot, savin, cotton root and their preparations, and all poisonous proprietary articles.

At the meeting of the Kings County Pharmaceutical Society in Brooklyn, on February 11, Mr. Alpers narrated his experience, and said that in one case he found a grocer selling laudanum put up in bottles bearing the label of the druggist who had been the most vigorous in his denunciation of the grocers of the town. The grocer explained that the druggist was quite an enterprising business man, as he sent around twice a week to keep him (the grocer) supplied with a full stock.

The Paterson Press printed an item criticising the New Jersey Board of Pharmacy and claiming that the examinations before the board were too severe for druggists and belonged to medicine rather than pharmacy. "A well-known local physician," without name, was reported to have called the proceedings "an outrage," and it was hinted that the members of the board were unfair in their doings.

Mr. Alpers made a very vigorous reply to this in a later issue of the Press, and we append a portion of his letter:

Allow me, as a member of the New Jersey Board of Pharmacy, to comment on these incorrect and vague statements.

Candidates who fail generally blame the examiners and are very quick in substituting alleged unfairness for their ignorance. Exaggerations mostly accompany such charges. So it is here. Your informant asserts that "at the last sitting of the board, three months ago, out of 100 applicants only four succeeded in getting through." The facts are that at the meeting referred to, October 17, 1895, there were 26 applicants, six of whom passed—that is, about 24 per cent.—instead of four, as claimed. If one man, a graduate of a College of Pharmacy, failed five times, the fault must lie with him; for at each of the five meetings every other candidate from his college passed, showing that the graduation from a good college is generally the best guarantee of success. The curriculum after which the board examines was not adopted arbitrarily by the board, but recommended by the New Jersey Pharmaceutical Association after a careful discussion at their last annual meeting in Newark, May 22, 1895, and therefore represent the wishes of the majority of the pharmacists of the State.

That the meetings of the board are now held in Trenton instead of various cities of the State is a wise innovation, adopted also by other examining boards; for Trenton with its excellent

normal school not only furnishes better accommodations for larger classes but also provides the board with a chemical laboratory for practical work which could not be had in any other city of the State.

If the three candidates from Paterson (not two, as was stated by your informant) failed to pass, I trust that they will not be discouraged by such a failure, but rather be instigated to new efforts, until they reach the goal of their ambition.

### The New York State Board Enforcing the Law.

SYRACUSE, February 18.—Secretary Dawson, of the New York State Board of Pharmacy, issued 26 notices to retail grocers in Utica, who have been selling drugs in defiance of the Pharmacy Act. Two of the grocers became frightened, and telegraphed immediately, offering to settle.

The Board has also begun a vigorous campaign against the violators of law in regard to registration. Complaint was recently received by Mr. Dawson that C. Veeder, of Rosendale, N. Y., placed an unlicensed man in charge of his store. The necessary evidence was procured, and both proprietor and J. H. Vosburgh, the clerk, were served with notices. The case did not get into court, as Veeder obtained the consent of the district attorney to settle the matter outside. The Board compromised with Veeder by the payment of \$50, and with the clerk by the payment of \$100. In this case the violation was done deliberately, as the clerk had tried the examination several times and had failed. He was given an examination after the case was settled and managed to pass.

Secretary Dawson states that the Board has been hampered in its work by the difficulty in obtaining evidence, notwithstanding the fact that the informant will be fully protected. Numerous complaints are received, but when evidence where with to establish a case is asked for the complainant usually refuses to obtain it.

### Druggists' Prosecutions in Ohio.

CINCINNATI, O., February 17.—Drug affairs were never in such a chaotic state as they are at present. Two cases have been tried against local druggists, charged with selling drugs not up to the standard, but the defendants came out victorious in the trials. The officers of the Food and Dairy Commission, however, have eighteen other cases against druggists, and news of the outcome of these suits will be awaited with intense interest, not only here, but all over the country. The local association of druggists, which is composed of more than 70 members, is doing all in its power to beat the cases, and all decisions before local magistrates will be appealed to higher courts where the defendants think they will have little trouble in winning their battles.

#### A GOULARD'S SOLUTION CASE.

One day last week Robert Groenland & Bros., who own two stores, one of which is at Fifth street and Central avenue, were tried for selling solution of subacetate of lead not of the proper strength. It is well known that this solution is subject to more or less chemical changes. The solution upon which the Groenlands were placed on trial was purchased at one of their stores by an officer of the Food and Dairy Commission on October 9, and now almost four months later they are brought up for trial. The

case was stubbornly fought, but the prosecution won and the case was appealed.

The next case to be tried is against Druggist Knemueuer, who is charged with selling impure phosphoric acid. Of course, a jury will be demanded, and in the event of the State bringing the case will be taken to the Court of Common Pleas. Pharmacist De Lang, at Fourth and Broadway, who was arraigned a few days ago for selling dilute phosphoric acid won his case, notwithstanding the strenuous efforts of those interested in the prosecution to obtain his conviction. Frank Fredericks, the Walnut Hills druggist, who was charged with selling impure compound tincture of iodine, was also fortunate enough to be acquitted, after the jury had remained out all night. These two victories have rather elated the druggists, and they really think it is foolish that they should lose a single case. In fact, parties on the inside claim that the druggist ought to beat every case with ease. Some druggists have been arraigned—or will be soon—for selling impure solution of cochineal, which is used about once a year for the purpose of coloring Easter eggs. When it became known that druggists were arrested on this charge, there was considerable laughing up sleeves. The charge is thought to be bordering on idiocy from the fact that it is so generally known that cochineal is used only as a dye, and never internally. The average druggist may sell two ounces of this article in a year, but a great many won't sell even this much.

#### DAYTON DRUGGISTS REPORTED ANXIOUS FOR A TILT WITH THE FOOD COMMISSIONER.

"You will notice that the Food and Dairy Commission has not tackled the druggists of Dayton yet," said a well-known druggist the other day, "and I tell you the reason. The pharmacists of the Gem City are organized. Every man in that city belongs to the association, and in union there is strength. In fact, the druggists of Dayton are a little anxious to have a tilt with the Commission, as they claim it would be an easy job to come out of the fray victorious. There is not a cutter in that town, and such union should be an object lesson for the local druggists. If our fellows would only get together like the Dayton men we would have little trouble in soon routing the Food and Dairy Commission, or making its officers direct their efforts to other branches of trade. Let them go after persons who are known to adulterate everything they get their hands on, and not molest the pharmacists who have been quietly serving the public for years. I for one think it is far from right."

### Kentucky Pharmacists Want the Law Amended.

The Kentucky Pharmaceutical Association will present a bill to the legislature at an early date involving an important amendment to the statute concerning pharmacists. The law now requires all drug stores in cities and towns of over 1,000 inhabitants to have only registered pharmacists to compound prescriptions. The new bill proposes to make this law apply to village drug stores as well, whether they have as many as 1,000 or 100 inhabitants.

### The New Pharmacy Bill in Massachusetts.

THE BOARD CHARGED WITH BULLDOZING—TEMPERANCE PEOPLE SUPPORT THE BILL—A SALEM EDITOR HAS SOMETHING TO SAY—LAWRENCE AND LYNN DRUGGISTS JOIN THE OPPOSITION—SIXTH CLASS LICENSES FOR OTHERS THAN DRUGGISTS.

BOSTON, February 22.—Another hearing on the legislative bill to regulate the practice of pharmacy, was held last Monday in the rooms of the Committee on Health at the State House. William W. Bartlett, for the remonstrants, read his protest against senate bill No. 7. In answer to the question concerning the object of the Alliance, of which Mr. Bartlett is president and secretary, that gentleman said the organization was formed for the purpose of watching legislation affecting the drug trade. He said it was formed for a broader purpose than opposing the Sunday closing of drug stores. He did not like the methods of the Board, and said he understood it to be a regular thing for the members to bulldoze druggists. He had himself not only been bulldozed, but had been insulted by the Board. Mr. Bartlett said further that an unregistered clerk could put up a prescription almost as well as the majority of registered pharmacists. The prescriptions were nearly all for patent medicines, and all that was necessary was for the clerk to pull off the label and put on the prescription. This remark of the witness gave the pharmacists present something to smile at, and they did so out loud.

Mayor Rockwell, of Fitchburg, representing the Fitchburg Druggists' Association, said the imputation of drunkenness was a gross insult to the druggists of Massachusetts. He criticized the bill, because it will compel every druggist to get a certificate of character before he can get a license from the aldermen or town authorities. Samuel Meadows of South Boston, James Sullivan of Springfield, Mr. George of Roxbury, and Mr. Tate of Clinton, also spoke against the bill.

#### INDORSES THE BOARD.

A resolution expressing confidence in the State Board of Pharmacy was passed at a recent meeting of the Massachusetts Total Abstinence Society. The society declares that no agency in the Commonwealth is doing more to remove the evil of intemperance, as promoted by the druggists, who turn their stores into liquor saloons.

This society is in favor of the legislative bill, which provides that license fees shall go to the State, and is also in favor of women voting on the license question, as they now do for the school committee. This sentiment found expression at a meeting held last week, at which there was an unusually large attendance.

#### SALEM EDITOR SPEAKS HIS MIND.

One of the Salem papers referred editorially to the agitation against the new bill to give the State Pharmaceutical Board more power. It said: It may be pointed out that it is very bad law-making to place arbitrary powers in the hands of any board or man, to the extent of making the action taken subject to no appeal and possibly simply on ex parte hearing. There should be no provision by which a druggist could be de-

prived of his method of obtaining his livelihood, except he shall first have a fair hearing; and there should be further provision that the finding of the Board should be revised by some higher authority.

#### LAWRENCE TAKES A HAND.

The other night 16 of the Lawrence druggists held a meeting, at which the proposed change in the pharmacy law was freely discussed. A vote was taken that the local association condemn the bill as a whole. The vote was 14 to 2, the two being, it is reported, Messrs. Emerson and Ketchum, who favored the bill, with the objectionable feature left out, the feature being the clause which gives the commission power to take away certificates without the right to appeal. The sentiment of the meeting was that the clause will have to go when the bill reaches the house.

#### LYNN APOTHECARIES OPPOSED TO IT.

A committee has been appointed by the Lynn Druggists' Association to oppose the passage of the law relative to pharmacy, and the committee instructed to use all means in its power to defeat the bill. The Lynn association is officered by Sydney P. Kenyon, president; C. Sargent Bird, vice-president; Frank E. Rickford, secretary and treasurer.

#### AT THE BOARD'S DISCRETION.

A bill that will undoubtedly excite more than ordinary interest has been introduced in the Legislature. It provides that licenses of the sixth class may be granted to persons other than druggists—in the discretion of the Board. The measure has been referred. The fee for such licenses is placed at \$1.

### After the "Cutters" in St. Louis.

ST. LOUIS, Mo., February 18.—All kinds of rumors are afloat as to what is going on between the local wholesalers, the "cutters," and the patent medicine manufacturers. That something is taking place is very evident from the quiet meetings that have been held and the kicks that some of the cutters are making. It might be well to state that the term "cutter" as used in St. Louis means those druggists who cut prices because they want to do so—not because they are obliged to do so—and who fought the Apothecaries' Society and Retail Druggists' League while those organizations flourished in this city. All St. Louis druggists cut prices more or less. As near as can be learned, the proprietary men and the wholesalers have come to an understanding by which the cutters, or any one else for that matter, cannot buy direct from the manufacturers. It is quite certain that, no matter what amount they purchase, there is only one price. This will enable the small suburban pharmacist to meet the price of the great down town stores who advertise such low prices on certain standard patent medicines. The druggists all over the city are jubilant over this. For months, or even years, they have watched these down town cutters sell certain patents at a figure below what they could obtain from the wholesaler.

### Annual Meeting of the National Association of Perfumers.

The third annual convention of the Manufacturing Perfumers' Association of the United States, was held at Rochester last week. The sessions were held at the rooms of the Chamber of Commerce, and after all of the business was disposed of the representatives were regaled with a banquet at the Rochester Club.

A large amount of purely routine business was disposed of, and when the adjournment was taken it was to hold an extra session in New York City some time during March next, the exact date to be fixed by the executive committee, which has the matter in charge. It was also decided to hold the next annual session in New York City.

The president of the association during the past year was Alfred G. Wright, of this city, and the delegates present paid him the deservedly high compliment of a re-election. The vice-president, secretary and treasurer were also chosen to fill their old positions for the ensuing year.

The present officers of the association are as follows: President, Alfred G. Wright, Rochester; vice-president, Theodore Ricksecker, New York; secretary, Henry Dalley, New York; treasurer, Sturges Coffin, New York; executive board, Robert C. Eastman, Philadelphia; Justin E. Smith, Detroit; John H. Winkelman, Baltimore; Adolph Spiehler, Rochester; Richard Hudnut, New York.

A large attendance is anticipated at the adjourned meeting to be held next month in New York City.

### The Advance in Price of Proprietaries.

The advance in the wholesale price of several proprietary remedies seems to have been in large measure due to the agitation on the part of the jobber toward securing better discounts. This reference seems justified by many of the facts in the case, and in particular by certain portions of the following letter, which has been sent to the jobbing drug trade by Dr. R. V. Pierce of the World's Dispensary Medical Association:

From the number of communications that we are receiving from jobbers located in all parts of this country, in relation to prices and terms for our goods, it is evident that there is a concerted action looking to the same end—"all along the line," and all aiming to secure 5 per cent. extra off our present prices.

While we have great respect for the opinions of our distributing agents, nevertheless we have to question the wisdom of this general movement.

#### THE BASIS OF THE REBATE PLAN.

Some years ago, when the rebate plan was first broached to us, we were assured that if we would adopt the plan and grant 10 per cent. discount on our prices to retailers, that the jobbers would all be happy, and that they could make a fair profit on such an arrangement. Now it seems that 10 per cent. does not pay the cost of handling the goods, according to the consensus of opinion, as expressed by jobbers.

#### THE EXPENSES OF THE JOBBING TRADE.

This would seem to indicate that the expense of conducting the jobbing business had been greatly increased in the years since the rebate plan was adopted. This we judge to be the case also from the discussion which we have listened to annually at the meeting of the N. W. D. A., and we have also gathered from such discussion that the aggressive competition which is going on between the jobbing houses has resulted in their sending out an inordinate number of travelers, canvassing the territory over very frequently, and otherwise largely increasing the expenses of running their business.

This being the case, what assurance have we that if an extra 5 per cent. be granted on our

goods, that this will be adequate to meet the increased expense of handling the jobbing business for years to come and afford the jobbing business for years to come and afford a satisfactory profit on our goods? What reason is there for believing that this extra 5 per cent. will not simply serve as a further "bone of contention," an extra incentive for still more extravagant methods of doing business, with here and there such cutting of prices on the part of some of the less loyal ones, and finally resulting, in all probability, in the breaking up of the rebate plan itself and going back to the "free for all and the devil take the hindmost" method of the days before the rebate system was established?

#### INCREASED DISCOUNTS A GOOD THING FOR THE CUTTER.

One thing seems very evident to us—i. e., that the Cincinnati house which has been so troublesome in the past will be delighted at every advance in the discount on goods, knowing that thereby they will the more easily obtain their supplies, "by hook or by crook," through irregular and roundabout channels, and that it will give them a greater margin to divide up and use as a bait for further trade. They have made their boast that they can make some money on even 5 per cent., as they do not send out any travelers, do their soliciting through circulars, and have none of the extravagant expenses of other houses, who send out a superabundance of travelers and conduct their business on more expensive methods.

#### AN EXTRA FIVE PER CENT. WILL KILL THE REBATE PLAN.

We do not claim to be prophets, nor the sons of prophets, but we will venture the prediction that if this 5 per cent. extra discount is generally granted the rebate plan will "go by the board."

This we should very much regret to see, because we believe that the jobbers are doing better to-day under a straight 10 per cent. than they ever did before the rebate plan was adopted. Furthermore, that if all the proprietors, in the past, had been required to give 10 per cent. off, that if large lines of goods which have heretofore been on the rebate list had been eliminated therefrom (and they never ought to have been put on the list), the jobbers would be doing fairly well to-day. By eliminating these goods and requiring all proprietors to sell their preparations through jobbers only and not give the cream of their business to the big retailers, and by cutting some of the extravagance in the employment of an excess of traveling sales agents, such improvement in the jobbing trade would be brought about that, in our opinion, there would not be the complaints, annually heard, that "it costs 10 per cent. to do business and therefore we can make no money."

The foregoing suggestions may seem to be somewhat impertinent, coming, as they do, from manufacturers, and dealing with matters outside our personal affairs, yet it has seemed to us that there is some excuse for our offering them in view of the fact that we were assured some years ago, when a committee of the N. W. D. A. called upon us to induce us to adopt the rebate plan, that 10 per cent. discount would be entirely satisfactory and that the jobbers would be able to make a fair profit thereon.

#### ANY ADDITIONAL DISCOUNT MUST BE ADDED TO THE RETAIL PRICE.

One fact further may as well be stated, and that is that if we should, at any time in the future, see our way clear to give an extra 5 per cent. off on our goods we shall certainly have to increase our prices to the retailer. The cost of advertising, which is a large factor in the expense account of every proprietary manufacturer, has advanced rather than declined in the past few years, and yet newspapers are becoming so cheap that the average farmer and mechanic get from four to a dozen papers at a cheap price, whereas they formerly only received one or two at most, and as a consequence the papers are less thoroughly read and the advertising worth correspondingly less. As advertising in these costs as much or more than formerly, it does not require any great sagacity to see that the manufacturer's profits are greatly reduced.

#### THE MANUFACTURER HAS SUFFERED AS WELL AS THE JOBBER.

Under all these adverse circumstances and the stringency of the times, if the jobber has had difficulty in showing a balance on the right side of his ledger, the manufacturer has also suffered correspondingly and it has taken a good deal of nerve for him to start out on an expensive advertising campaign under such circumstances.

Under the conditions which confront us, we cannot, much to our regret at present, see our way clear to make our terms different from what they have been for several years past, notwithstanding that we would very much like to do anything in our power to favor our distributing agents.

### New Pharmacy Law for Maryland.

The Maryland Pharmaceutical Association, in conjunction with the Maryland College of Pharmacy, is trying to have a pharmacy law passed.

Section 1 of the bill sets forth that it shall not be legal for any person to retail or dispense drugs, medicines or chemicals, or to compound or dispense physicians' prescriptions, or to open, own, or conduct any pharmacy for retailing, compounding or dispensing the same, unless these persons shall be or shall employ in charge of said pharmacy a registered pharmacist or qualified assistant.

Section 2 provides that every pharmacy, store or shop where drugs, chemicals and medicines are sold, retailed or displayed for sale at retail, or where physicians' prescriptions are compounded, shall be considered a pharmacy within the meaning of the law.

Section 3 describes that a registered pharmacist under this law must be a person who has had four years' continued practical experience in pharmacy, where the prescriptions of medical practitioners are compounded, and who has passed a satisfactory examination before the Maryland board, or who has been for the same period of time practically engaged where prescriptions of medical practitioners are compounded, and has been personally engaged in the business of a dispensing pharmacist, or who is registered as a pharmacist in Baltimore at the time of the passage of the act.

Section 4 provides that a qualified assistant shall have had at least two years' continued practical experience in the pharmacy, as is provided in the preceding section. Such a qualified assistant shall only act in the absence of the registered pharmacist in charge of the pharmacy in which the qualified assistant is engaged, and he can only do this under the regulations prescribed by the Board of Pharmacy. And the qualified assistant cannot engage in business on his own account or take entire charge or manage any pharmacy.

Section 5 provides that the Maryland State Pharmaceutical Association shall nominate 15 persons, ten of whom are to reside in Baltimore and five in other counties of the State, from whom the Governor shall nominate a board of five commissioners, three from Baltimore and two from other parts of the State, and these shall constitute the Maryland Board of Pharmacy.

Under section 6 the secretary and treasurer is to receive a salary to be fixed by the board, and the other members to receive the sum of \$5 each day they are actually engaged in the service. The board is to hold meetings at least once in three months in Baltimore, or at any other place where it may be deemed expedient.

Section 8 provides that any person who, after the passage of this act, may sell at retail medicines, drugs or chemicals for medical use in the compounding of prescriptions for that State, without complying with the requirements of the act, shall be guilty of a misdemeanor, and subject to a fine of \$50 for every week he shall continue to so vend retail drugs, medicines or chemicals for medicinal use.

Section 9 provides that any pharmacist who shall forward to the State board, on or before June 15 next, satisfactory proof, with affidavit that he has had four continuous years' active experience in

pharmacy, compounding and dispensing medicines, and that he was engaged in the business of dispensing pharmacist on his own account in Maryland at the time the act takes effect, shall, upon the payment to the board of \$2, be granted a certificate of registration as a registered pharmacist, without examination. Annually thereafter he shall pay to the board not more than \$1 so long as he continues to act as a registered pharmacist, but if he fails or neglects to register the advantage given to him by this section shall be forfeited. This section, however, shall not apply to any pharmacist engaged in business in Baltimore who is not registered as required by the act entitled, "An act to prevent incompetent persons conducting business as pharmacists, or vending at retail drugs, medicines or chemicals for medicinal use in the city of Baltimore." Approved April 1, 1887, and amended in 1892.

Under section 10, in the case of the death of a registered pharmacist doing business under this act, the legal representative may continue the business for the benefit of the estate of the deceased under the control of a registered pharmacist. Any assistant or clerk in any pharmacy, not less than 18 years old, who shall not have the qualifications of a registered pharmacist within the meaning of this act, or who, when the act takes effect, shall have been employed or engaged for two years or more continuously in the pharmacy or pharmacies as described in this act, shall, upon application for registration and the payment of \$1 within 60 days after the act takes place, be granted a certificate of registration as a qualified assistant, without examination. Annually thereafter he shall pay to the board 50 cents so long as he remains a qualified assistant.

Section 12 sets out that no person, unless he shall be a registered pharmacist or registered qualified assistant, can compound or dispense drugs, medicines or prescriptions, or sell at retail or dispense poisons for medicinal use, except under the supervision of a registered pharmacist. Any registered pharmacist violating this act, or permitting it to be violated in his store, is subjected to a fine of not less than \$10 or not more than \$50. This act shall not be construed as preventing any acting physician from preparing any prescriptions, nor shall it prescribe or prevent the sale of patent medicines, nor shall it prevent the sale of medicines of official strength, put up in original packages, bearing the name of the person or persons by whom put up or manufactured.

Section 13 provides against adulteration.

### Another "Free Alcohol" Bill.

Senator Hoar has introduced in Congress a bill providing for the administration of Section 61 of an act passed August 28, 1894, relating, among other things, to internal revenue taxes on alcohol. Section 61, which was introduced by Senator Hoar, provided for the rebate or repayment of internal revenue tax paid on alcohol used in the arts or in any medicinal or like compound, but omitted the usual provisions for carrying the law into effect. No rebates were paid under the law, as the Secretary of the Treasury held that the act was inoperative pending further legislation by Congress. Claims for rebates running up into the millions have accumulated and

Senator Vest proposed to amend by simply repealing Section 61. This raised a question as to the validity of existing claims and now Senator Hoar presents his bill as a solution of the difficulty. The Hoar measure provides for inspectors, defines their duties, etc., and levies upon rebate claimants a maximum of 8 per cent. of their claims to defray the expenses of inspection. The outcome of this free alcohol legislation will be watched with interest.

### Hartford Druggists' Organization.

The Hartford, Conn., druggists held their annual meeting on February 6, and elected the following officers: T. R. Shannon, president; Josiah Howe and Edwin Crary, vice-presidents; C. H. Bell, secretary, and L. H. Goodwin, treasurer.

The newly elected president, T. R. Shannon, has been in the drug business in Hartford for 17 years. His first engagement was with A. Marwick, and they conducted a pharmacy on Trumbull street. At the end of three years the partnership was dissolved and Mr. Shannon has ever since conducted the store himself. Mr. Shannon graduated from the Massachusetts College of Pharmacy in 1876. He has been vice-president of the Connecticut Pharmaceutical Association, and is now a member of the Executive Committee. Several years ago Mr. Shannon was president of the Hartford association, and his recent election to his old position attests the high esteem in which he is held in the profession. He is also a member of several local organizations.

### Caught on Bogus Quinine.

BEATRICE, February 6.—A well dressed man, who registered as J. O. Borst, Chicago, has been calling on several druggists of the city, representing himself as a quinine salesman, and offering to deliver the article at 18 cents per ounce.

The extreme low price interested several dealers, but they had some doubts about the article being genuine. Their doubts were dispelled, however, by the man subjecting the article to analysis. He had with him a quantity of chlorine water, for the color reaction, and as it necessitates some trouble to prepare and is not usually kept in stock his chlorine was used to make the test, which proved entirely satisfactory and the sale of 800 ounces was closed and the goods delivered. Suspicion was aroused later, and resulted in the determination to make a test with freshly prepared chemicals, and W. D. Simmons made the analysis this afternoon and reports the article as cinchonidine, with only a trace of quinine. The patrons of Mr. Borst are mourning the loss of about \$42, as the article purchased is quoted on the market at less than 4 cents per ounce, against 18 cents which they paid. The packages delivered were marked "Sulphate of Quinine, Lion brand die Deutsche alkaloid und chemische fabrik depot, U. S. America, 132 and 134 Front street, New York."

### The Best in the Market.

I would not be without the AMERICAN DRUGGIST for anything. I find it to be the best in the market.

CHAS. P. KALBAUGH.  
BERNVILLE, PA., December 30, 1895.



## NEW YORK CITY.

A. N. Gilbert has opened a new pharmacy at 527 Grand street.

R. J. Pay has opened a new pharmacy at Ninety-first street and the Boulevard.

A new pharmacy has been opened at 3057 Third avenue by Dr. H. S. Hutchens.

A new pharmacy has been opened at 185th street and St. Nicholas avenue by Mr. Vygan.

George S. Davis, of Detroit, made a flying visit to the New York branch of the firm last week.

Schaaf Bros. of 798 Eighth avenue have opened a branch pharmacy at 8409 Third avenue, between 116th and 117th streets.

W. D. Stearns, assistant manager of Frederick Stearns & Co., Detroit, spent a few days in New York City last week.

T. T. Stoutenburgh has disposed of his store at Almeda, N. Y., and bought a larger business at Davenport Center.

Lawyers' Pharmacy is a new store opened recently in Oswego, N. Y., by a former clerk of C. J. Vonwinkle.

John Carrick, head of the firm of Reed & Carrick, was last week elected to membership in the Hardware Club.

Hedwig Milloche of 1617 First avenue has recently effected a number of improvements in his store and has added a new soda fountain of ornate design.

B. G. Field has succeeded Mr. Stewart as manager of Richard Hudnut's handsome pharmacy at 925 Broadway. W. G. Austin has charge at night.

T. G. Phinney, of Johnson & Johnson, is in the city again, after a stay of some months in Europe, where he went in the interest of his firm.

H. Vail & Co., publishers, 6 East Seventeenth street, New York, announce a new edition of Nelson's Poison Register, to be ready about March 1.

Charles D. Allee, formerly with Riker & Co., is making preparations to open a new pharmacy at Freeport, L. I. He has already invested in a soda fountain of the Low Art Tile pattern.

G. W. Hopping, treasurer of Seabury & Johnson, took advantage of the Lincoln Birthday observance in this city to make a flying trip to Montreal in the interests of his firm.

J. Wackerbarth, class of 1888, N. Y. C. P., is a recent acquisition to the staff of J. N. Hegeman & Co.'s Third avenue pharmacy, which is under the management of Julius Tannenbaum.

Isabella Eastburn has recently bought property in New Brunswick, N. J., and is having it fitted up for a drug store. The New York Store Fixture Company have the contract.

Kress & Owen, the well-known manufacturing chemists of Pearl street, have purchased from the Proteinol Company the sole rights to the manufacture and sale of Proteinol.

C. A. Grasselli, president of the Grasselli Chemical Company, the widely known manufacturers of glycerin, Cincinnati, was noticed in the chemical market last week.

Dr. R. V. Pierce, ex-president of the Association of Manufacturers of Proprietary Articles, was in the city last week, presumably on business connected with rebate matters.

One of the largest consignments of quinine entering the port of New York recently was billed to the New York branch of Boehringer & Soehne. It amounted to 268 cases.

It should be noted that the item in a recent New York morning paper about a certain Harry Thornton having been stricken in a surface car does not relate to the genial and robust Harry Thornton of P. D. & Co.'s Jersey staff.

E. A. Sayre of Seabury & Johnson's has had experience as a newspaper man. He was associated in the early sixties with Richard Watson Gilder in the editorial management of the Newark *Morning Register*.

Brodel Bros., 1679 Third avenue, are said to have the prettiest pharmacy on the East Side. The fixtures are of solid mahogany and the walls are relieved with fine art decorations. The fountain is of tile and of the latest design.

J. Horton Uhle of 144th street and Amsterdam avenue is making ready for the summer season by increasing his soda water facilities. He has invested in a new tile fountain of the Low Art pattern.

Albert Schultz, for many years with J. N. Hegeman & Co., is about to open a new store at Webster and Mulberry streets, Scranton. The Low Art Tile Company have secured his contract for an Art Tile fountain and counter.

A pharmacy is to be opened next month, under the Broadway Central Hotel, this city, by a Dr. Tompkins. There was a pharmacy located here about 12 years ago, which was owned by the elder Hegeman.

Fred W. McGee is making extensive alterations in his pharmacy at Rutherford, N. J. He will provide a private consultation room for the use of his medical patrons, and has extended his dispensing facilities.

The Manhattan Glassware Company have been incorporated at Albany to manufacture glass bottles and glassware in Brooklyn. Capital, \$12,000. Directors: Helen Boley, Benjamin Boley and Solomon Bremas of Brooklyn.

O. W. Cauley is now in charge of Hazard, Hazard, & Co.'s big pharmacy under the Victoria Hotel. J. F. Finerty, who has been connected with the firm for a number of years as assistant bookkeeper, is still looking after the accounts of the firm.

H. A. Cassebeer has been forced to move from his present location at 292 Sixth avenue to make room for the extension of Siegel, Cooper & Co.'s mammoth establishment at Nineteenth street. He has leased new premises at Seventy-sixth street and Madison avenue.

The old and well-known Broadway Pharmacy in Nyack, lately and for many years under the management of Dr. D. DeGraff, has been purchased and completely restocked by C. Carter Cranmer, who intends to devote his entire time to the reconstruction of its business.

Alfred Hy. Mason, secretary of the college, has been on the sick list from some

form of grippe ever since the last college meeting. His many friends will be glad to know that he is now on a fair way to recovery and was able to preside at the meeting of the Society of Chemical Industry, February 17.

Frank E. Brownell, the well-known Orange pharmacist, has placed his son, C. Newton Thompson, in charge of one of his stores there. Mr. B. is an alumnus of the N. Y. C. P., and will be remembered by many former classmates as the manager of Dugan & Merritt's successful Columbus avenue pharmacy.

A new style of ball for bowling has been tried by some of the men playing in the drug trade bowling tournament. There are holes in it for three fingers besides the thumb, and is the outcome of an idea on the part of the head of one of the houses, himself an enthusiastic bowler.

The Physicians and Surgeons' Association of New York City has been incorporated to keep books and collect accounts for physicians, surgeons, dentists, pharmacists and others. Capital, \$10,000, and directors, Constant A. Andrews, Daniel Lewis, S. D. Powell, Paul Jones and Chas. B. Sterling of New York City.

J. E. Brannigan of Sixty-seventh street and Amsterdam avenue has had his premises entirely refitted by the New York Store Fixture Company. The refitting was made necessary after the destruction of the greater portion of the woodwork by fire caused by the accidental ignition of some material which he was melting over a stove.

Cyrus Calvert (C. P.), formerly of Calvert Bros., Cincinnati, was in town last week. C. P. is not interested in drugs to the same extent as formerly, and is now connected with a dye house. He has made a striking change in his appearance by shaving his upper lip, and old friends required a fresh introduction.


The rumors that J. N. Hegeman & Co.'s Theater Pharmacy at Thirtieth street and Broadway is for sale are without foundation. A reorganization was effected recently and A. Wiseman, N. Y. C. P. 1876, is now president of the corporation. John W. Ferrier is vice-president; J. B. Glenn, treasurer, and H. Coleman secretary, as heretofore.

R. Tom Tanner, who is widely and favorably known throughout the New England States as one of Sharp & Dohme's most active salesmen, was in New York last week, and through the kindness of a friend was introduced to the charmed circle that meets once a day for luncheon in the Anarchists' Den, on Fulton street. K.'s favorite vintage, at 15 cents a half schoppen, was duly tested and approved of.

J. P. Jones, the New York State representative of Sharp & Dohme, is in town stopping at the Astor House. Mr. Jones is wearing his best 1896 smile, and is said to always carry with him the left hind foot of a graveyard buck rabbit killed on a Friday night, the 18th of the month, in the dark of the moon by a red-headed, cross eyed negro, with a silver bullet. His competitors say this is why Mr. Jones is so successful.

E. T. Green, the active New England representative of the Mallinckrodt Chemical Works, made his appearance at the New York office of the firm last week,



after a prolonged stay in the section allotted to him. He reports an increasing demand in the leading hospitals for the Mallinckrodt stronger ether for anesthesia. He says it is now generally preferred over all other makes by eminent surgeons. 

New York druggists are asking who is the Philadelphian who is opening a new pharmacy at 145th street and Edgecombe avenue, this city. A beginning was made and announcement of the early opening of the store displayed some two months ago, but the residents of that section have long since lost confidence in the announcement, as little if any progress toward completion has been made since the premises were rented. Somebody wants to wake up.

Kuehn & Lubbers, the New York representatives of the E. L. Patch Company, Boston, will move next week from their present location at 140 William street to more commodious premises at 188 William street. Desk room in their new offices has been assigned to Geo. H. Hanna, the New York representative of H. C. Fox & Son, glass manufacturers, Philadelphia, and to Wm. S. Boyden, Eastern representative of the Herf & Frerichs Chemical Company of St. Louis.

A. Cressy Morrison of the Pabst Brewing Company, Milwaukee, spent a few days in the city last week in the interests of the publicity end of the Pabst Company. Mr. Morrison will be remembered by a host of friends in both the wholesale and retail drug trade as a very active member of the N. W. D. A. He is well known as a story writer, and several of his works have appeared in the Christmas magazines. He is also an enthusiastic cyclist and was recently chosen vice-president of the League of American Wheelmen. The New York Times printed a portrait sketch of Mr. Morrison in connection with the latter event.

And now it is the Socialists who have discovered that the drug stores of this city are being run by the capitalists—that they adulterate their drugs, sell worthless medicines, give short weight, charge exorbitantly, etc. To overcome all this the Socialists belonging to the Workingmen's Sick and Death Benefit Fund have proposed to their organization to establish a drug store in the central part of the city, where members of the society and working people generally may obtain fresh and reliable medicines at the lowest possible cost.

Two new chemical companies were recently incorporated at Albany. They were the Equitable Chemical Company of New York City and the Electric Chemical Company of Orangeburg, Rockland County, this State. The former company have been incorporated to manufacture chemical preparations to treat diseases arising from germ infection. Their directors are Alfred Loader and Edmund A. Wheatley of New York City, and Minnie M. Williams of Harrison, N. J. The Electric Chemical Company have a capital of \$60,000, and the directors are E. F. Leber and Albert Bernhard of New York City and Otto Porsch of Orangeburg.

A case affecting Germans becoming American citizens has just been decided by the Supreme Court of the Empire in Leipzig. F. W. Boehme, a druggist living in Brooklyn, N. Y., and a native of

Leipzig, was sentenced by a lower court to pay a fine of 200 marks for emigrating to a foreign country without having fulfilled his term of military service. He appealed through his father from the decision of the court. The Supreme Court, in rendering its decision upon the appeal, finds that Boehme, as a duly naturalized citizen of the United States, could not be punished for an act committed through his emigration to America, but that he could be punished for any act committed prior to his emigration. The court, therefore, reversed the decision of the lower tribunal. If Boehme had left the country to escape military service the judgment of the Supreme Court would have been different.

#### VISITORS.

L. L. Pope, the tall representative of the Lawrence-Williams Company, Cleveland, was seen in New York last week.

Among recent visitors to the New York drug market we noticed: Wm. Kemmerle of Philadelphia, J. J. Strauss and D. L. Cook of Trenton, W. H. Jackson of Belmar, N. J.

H. E. Marvin of the Walding, Kinnan & Marvin Company, Toledo, Ohio, sailed from New York for Europe on the 8th inst. He is accompanied by his family and will make a brief stay in Italy.

#### COLLEGE STUDENTS UP FOR EXAMINATION BEFORE THE CITY BOARD.

Dr. Balser, the veteran secretary of the New York City Board of Pharmacy, was surprised the other day by having 118 applications for examination sent to him by as many of the senior students of the New York College of Pharmacy. It has been the custom heretofore for the students to separate after graduation, and to afterward seek registration either on their diplomas or by examination in whatever part of the State they might happen to locate in. Professor Diekman suggested that, inasmuch as the examination certificate of the city board was accepted by the several county boards and by the State board in lieu of examination, it would be a great saving of time to the students (and money to the city board!) if the board examination could be taken before the close of the term, and while the students were attending lectures. Hence the recent increase of candidates for examination before the board.

#### FIRE IN A DRUG AND SPICE MILL.

The seven-story factory of Crampton Brothers, drug and spice manufacturers, which during the last 30 years has stood where Rutgers Garden used to be in the days when the lower East Side was a fashionable dwelling house district, was badly damaged by fire during the night of February 17. The loss is placed at \$25,000, and is covered by insurance.

The mill includes Nos. 2, 4 and 6 Rutgers street. To the north, and fronting on Rutgers street, is a long line of tenement houses known in the neighborhood as Penitentiary Row. The mill overtops these by three stories, and the tenants of the row, fearing an explosion among the drugs, which rumor had it, were stored in the mill, carried their furniture out to the sidewalk and made preparations for a hasty flitting. An hour's work on the part of the firemen, however, got the flames under control, and there was no explosion. The cause of the fire is unknown.

#### Branch of the Red Cross.

A branch of the Red Cross Society, which has its headquarters at Washington, has been established at 233 West 100th street, this city. Robert Wood Johnson, president of the firm of Johnson & Johnson, who is one of the trustees of the society and a charter member, spoke to a reporter for the AMERICAN DRUGGIST recently concerning the society and its objects. "The objects of the Red Cross Society," he said, "are to establish Red Cross Hospitals, provide ambulances and first aid to the injured in any calamity beyond the control of the local charities. The benefits of the association can be drawn upon at the call of the president and are not limited to any race, nationality or country. Its benefactions are freely tendered where the need exists, and the president of the society, Miss Clara Barton, is now on her way to Turkey to relieve the distressed Armenians. A grand entertainment for the benefit of the society has been projected and it will be on an immense scale. It will take place in the large amphitheater of the Madison Square Garden and will be under the auspices of many distinguished persons. Governor Morton and his staff are expected to be present. The entertainment will take the form of a realistic representation of the condition of war both before and after the existence of the Red Cross Society. Soldiers, guns and camp equipments will all be shown. The duties of a hospital steward during war will be performed by members of the Association who are apothecaries."

Mr. Johnson is taking a keen personal interest in the success of the movement and says it is being taken up by the leading people here.

We learn since the above was written that the New York Red Cross has been incorporated. Among the incorporators are Mrs. Charles H. Raymond, S. E. Barton, C. H. Cottrell, Page C. Dennis, Bettina A. Hoffer, Dr. A. M. Lesser, Dr. C. Ruxton Ellison, Dr. H. G. Steger and Robert Wood Johnson. The objects of the Red Cross, as stated in its certificate of incorporation, are:

"To establish a corps of physicians, surgeons, and nurses for the purpose of attending the sick or wounded of all nations, creeds and sexes, in any position of life, in time of peace or war. To treat and nurse the sick and wounded at their homes, and if the latter do not afford the necessary facilities, to provide a place for them in which they can receive proper medical and surgical attendance. To supply the sick or wounded with pure medicines and surgical dressings of the best and purest material. To prepare and supply the Association of the American National Red Cross with nurses, medical and surgical aid and assistance as they may call for."

#### Captured a Burglar.

Charles F. Schinkel, a well-known Ninth avenue pharmacist, played a very clever part recently in the arrest of a safe burglar. A strange man of refined appearance called at the pharmacy, which is situated at the corner of Ninth avenue and Thirtieth street, a few days ago, and asked Mr. Schinkel if he was an analytical chemist. The pharmacist said he occasionally did analytical work, and requested the stranger to make known his wants. The man coolly replied that he wanted a half a pound of nito-glycerin

for which he was willing to pay \$10, or, if this was not enough, he would pay any reasonable price the pharmacist might name. He explained that he wished the nitro-glycerin for purposes of experiment. Mr. Schinkel was staggered for a moment, and when he got his breath he pointed out that such a quantity of nitro-glycerin was rather excessive, and finding that his visitor had no conception of the exceedingly dangerous character of the explosive in its concentrated state, he advised him to come again next day, when he said that he would see what he could do for him. Mr. Schinkel had his suspicions fully aroused by this time, and believing that he had a desperate character to deal with he communicated with Police Headquarters. The officer on duty at the time was at first inclined to make light of the occurrence, and said the man was a flim flammer who would probably end his business by attempting to trade gold bricks, but the druggist knew better, and prepared himself for a meeting with his nitro-glycerin customer. The man called next day, and the proprietor being out, the clerk told his customer that Mr. Schinkel was busy on the preparation of the explosive, and asked him to leave a deposit of \$5 and call next day, naming an hour. The man did so, and pocketed a receipt for the money. Mr. Schinkel notified the Detective Bureau, and an officer was on hand to arrest him when he called. He indignantly protested against his arrest, but after he had been searched and a big revolver and \$200 in bills found on him, he broke down and told the officer that he was a burglar, and that he wanted the nitro-glycerin to blow open safes with. The arrest is regarded as an important one, and Mr. Schinkel's part in the affair has met with the very heartiest commendation from the police authorities.

### Students See Crude Drugs.

It has been the custom for some years past for the graduating classes of the Philadelphia College of Pharmacy to pay a visit of inspection under the guidance of the professors to the crude drug warehouses of Parke, Davis & Co., in this city. The week before Christmas is the time usually selected, but this year the visit was delayed until the second week in February. On this occasion the students were accompanied by Professors Remington, Bastin, Lowe, Ryan, Moerk and Morrison. The teaching faculty of the college consider this one of the most important days in the student's career, as it affords him a rare opportunity to acquaint himself with the appearance of drugs in their crude state, something which is not always possible during his term at college. The students were conducted through the extensive warehouses of the firm at 90 to 94 Maiden Lane by John Clay, the manager of the New York branch, assisted by Dr. Bird. The visit lasted four hours, and the greater portion of this time was spent in the lofts. The visitors were first conducted to the ground floor, where they were shown mammoth bundles of liquorice, orris root and other varieties of vegetable drugs in original packages. The original packages of aloes on the second floor proved an interesting sight to many of the students who had never heard of the custom of packing aloes in monkeys' skins. The distinction between guarana and gamboge was explained to the students by a comparison of the two substances in sep-

arate bottles. Other specimens seen on this floor were star anise, cocoa pods from Venezuela, pariera bark, &c. The third floor of the building is devoted to the storage of manufactured preparations. In going through this department the students were shown the great variety of articles turned out in Parke, Davis & Co.'s laboratories. One of the smallest and most popular articles shown was a neat vest pocket menthol holder, made of aluminum; these are made to retail at about five cents. The fourth floor was packed with asafetida, colocyath, and the ubiquitous cuttle-fish bone, which was found on every floor of the establishment.

The students were then conducted back to the second floor, where an elaborate hot luncheon was served. Mr. Clay presided at the center table, and short impromptu speeches were made by a number of the visitors. Professor Bastin was accompanied by Mrs. Bastin, and in rising to address the gathering, Professor Remington said that while the ladies of the party had joined in the expressions of appreciation which all felt, he knew that Mr. Clay would appreciate it greatly if he could hear from one of them, and Mrs. Bastin's name being mentioned, that lady responded very graciously to the invitation, and told how much she regretted not being a permanent member of the graduating classes so that she might enjoy a visit of this kind every year. Other members of the faculty made brief addresses, Professor Morrison making a very witty response to Mr. Clay.

It has been Mr. Clay's privilege during the many years he has been connected with the firm to receive the graduating classes of the leading schools annually, but, as he said, he has never been so much impressed with the high character of pharmacy students as with this year's class of the Philadelphia College of Pharmacy.

### Drug Trade Bowlers.

The first of the series of matches arranged for by the Produce Exchange Club between the Produce Exchange, the Bank Clerks' League and the Wholesale Drug Trade Association, was rolled February 8, when the Produce Exchange met the Drug Trade Association and vanquished them. The men of pills, plasters and graduates played in good form, and the high score of the "Producers" might have been lessened considerably had the druggists enforced the rules of the game more strictly in the third game, when their opponents were short two men, but they generously allowed them to fill the vacancy with two men who played in the first game, and the druggists were outplayed. The scores were:

#### FIRST GAME.

PRODUCE EXCHANGE.			DRUG TRADE.		
S.	S. B.	Score.	S.	S. B.	Score.
Riggs...	2 5 3	159	Fisher...	3 3 4	180
Fetterolf...	1 5 4	152	Heck...	0 6 4	140
Barber...	1 7 3	152	Hoffman...	2 5 3	159
Rosen...	4 3 3	195	Norris...	1 5 4	142
Purdy...	2 4 4	180	Timken...	1 6 3	147
Totals.	9 24 17	818	Totals.	7 25 18	748

#### SECOND GAME.

DRUG TRADE.			PRODUCE EXCHANGE.		
S.	S. B.	Score.	S.	S. B.	Score.
Howe...	0 7 3	154	Zann...	4 3 3	177
Ely...	2 6 2	180	Simonds...	1 2 7	114
Martin...	2 4 4	138	J. Barber...	1 5 4	142
Mariager...	0 7 3	156	Chase...	2 3 5	142
Carr...	3 3 4	150	Cornish...	2 6 2	172
Totals.	7 27 18	758	Totals.	10 19 21	747

#### THIRD GAME.

PRODUCE EXCHANGE.			DRUG TRADE.		
S.	S. B.	Score.	S.	S. B.	Score.
Riggs...	1 8 1	186	Harnes...	2 3 5	185
Barber...	4 5	127	Ruddiman...	2 5 3	164
Holmes...	3 4 3	156	Lawrence...	3 2 5	188
Holmes...	0 6 4	144	Faulkner...	3 3 4	159
Trafton...	1 5 4	145	Tamlyn...	0 8 2	159
Totals.	6 27 17	758	Totals.	10 21 19	755

The leading wholesale houses were represented at the tournament, the following being a partial list of those in attendance: SEABURY & JOHNSON: E. A. Sayre, L. W. De Zeller, P. M. Harrington, R. A. Tremper, W. Caughy, W. E. Tremper; PARKE, DAVIS & CO.: John Clay, Syd. H. Carragan; MCKESSON & ROBBINS: Chas. M. Weisz; BRUEN BROS. & RITCHEY: W. P. Ritchey; LAZELL, DALLEY & CO.: Mr. Fox; LANMAN & KEMP: L. Stevens; DAVID GREEN: David Green, Jr.; COLGATE & CO.: Sidney Colgate; and the following retail pharmacists, viz.: Fred Wichelma, Gilbert Reeder, Dr. H. Dehmhoff.

### The Alumni Meeting.

A light attendance of students and alumni of the New York College of Pharmacy assembled in the lecture theater on Wednesday, February 12, to listen to a gentleman who told the tale of his experiences while on a trip through Europe. In London the lecturer had visited the Sailor's Home and Salvation Army Barracks and other East End attractions. He thought the Salvation Army was "a splendid institution." John Burns, the labor agitator, was quoted as "a learned man" who had expressed some opinions regarding the relative wickedness of New York and London. The lecture had absolutely nothing to do with pharmacy, and consisted for the most part of the expression of a lot of religio-sentimental observations on the social condition of the poorer classes of London and the capitals of Holland and Germany. As a lecture it could hardly be called a success. At its conclusion, chairman Graesser announced that Dr. Wendel C. Phillips would speak on "The Light and Dark Sides of Hospital Life" at the next meeting on March 11. The lecture will be illustrated with stereopticon views.

### New By-Laws for the College.

The committee which was appointed on January 21 for the revision of the by-laws of the New York College of Pharmacy have completed their work and a vote on the adoption of the amended by-laws will be taken at the annual meeting, which occurs March 17.

The most important change proposed is the appointment of a chairman of the Board of Trustees, whose duties shall comprise attendance at all meetings of the Board of Trustees, and the appointment of standing committees of the Board. One effect of this change will be to relieve the president, if he so desires, of the endless detail work which has heretofore characterized the office.

The intention, as explained by a prominent member of the college, is to make it possible to appoint to the office of president any individual who has distinguished himself in pharmacy, any of the allied sciences or in work of a public character. The college has attained a position of eminence before the country, and it is thought desirable to have for its

head a gentleman of national reputation. It is understood that the movement meets with the approval of President Fairchild, and the amended by-laws will, it is thought, be adopted without opposition. The report will be signed by the full committee, composed of H. W. Atwood, chairman; T. J. Macmahon and Dr. Chas. Rice.

At the regular meeting, called for February 28, the Nominating Committee will present their report. Edward Kamp is slated for president, and Herbert Robbins for treasurer.

### May Be a Millionaire.

Benjamin Altheimer, a Brooklyn druggist, is a lucky man. He conducts the Bijou Pharmacy in Smith street and also owns a drug store in Fulton street; but besides that he is one of the heirs to the vast estate of David Seymour Strauss, which has been accumulating in the Bank of England for many years. He is a great-great-grandson of Strauss, and the value of the fortune is put at the fabulous sum of \$80,000,000.

Mr. Altheimer says he does not need the money, and is satisfied with a good business, which he has built up for himself.

"However," he said, "no one can blame me for wishing for it to come, and for expecting that it will. I may have to wait some time, and again I may soon have it. I can see lots of places where I could use the money and do lots of good with it. I would devote a good share of its income to that purpose."

If Druggist Altheimer is equally successful with a number of other heirs who claim part of the estate he will come into something over a million dollars after all expenses are paid.

### Meeting of the Kings County Society.

The regular monthly meeting of the Kings County Pharmaceutical Society was held at the Brooklyn College of Pharmacy on Tuesday afternoon, February 11, President F. H. Pamphilon presiding.

The report of the Committee on Legislation proved quite interesting, as several members of the committee, including Messrs. Paradis and France, had attended a hearing on the Raines liquor bill in Albany and had protested against that part which applied to the pharmacists. The chairman, Mr. Werner, having been unable to attend, his place on the committee had been filled by Mr. Muir. After hearing the statements made, Mr. Raines promised the committee to consider an amendment if they would submit one prescribing a smaller fee for licenses to pharmacists. The committee stated that it appears from the newspapers that the bill has been changed since this interview by Mr. Raines, so that pharmacists will have to pay \$125 instead of \$250 annually for a license.

Secretary Bliss read communications from several members of Congress in response to the request made by the society that the free alcohol bill and the bills for the improvement of the position of pharmacists in the army and navy be given their support. A letter was read conveying to the society the thanks of the naval apothecaries stationed at the Brooklyn Navy Yard for the support which the society was giving to the bills for the reorganization of the pharma-

ceutical service of the navy. A letter was also read from Dr. George F. Payne of Atlanta, requesting that the commendatory resolutions which were passed on this subject be forwarded to the Secretaries of the Navy, Army and Treasury, and on motion of Dr. Brundage this was ordered done.

### PROF. BARTLEY ON URINE ANALYSIS.

Prof. E. H. Bartley, dean of the faculty of the college, made a very interesting address on urine analysis for the pharmacist, devoting 50 minutes to the subject. He outlined the field of work which is open to the pharmacist in this direction, giving its limitations as well as its opportunities. We give an abstract of the address elsewhere in this issue.

### VISITORS FROM NEW JERSEY.

The president announced the presence of H. J. Lohman of Jersey City and W. C. Alpers of Bayonne as visitors and invited them to address the society. In response Mr. Lohman made a few remarks concerning the National Formulary, stating that the paper presented by Mr. DeForrest at the last meeting of the New Jersey Pharmaceutical Association\* had aroused much interest and was, he believed, bearing good fruit.

### FOR BOTTLING VISCID LIQUIDS AND OINTMENTS.

Mr. Alpers showed the members a water bath which had been made under his direction for use in bottling petrolatum, &c. A description of the apparatus and an abstract of Mr. Alpers' remarks appear elsewhere in this issue.

The thanks of the society were extended to Mr. Alpers for his very interesting communication.

### ENFORCING THE PHARMACY LAW.

Secretary Perkins of the Board of Pharmacy made some remarks explanatory of the work recently done by the board in the line of inspection. In December, 1894, there were 468 drug stores in Brooklyn, which by December, 1895, had been increased to 470, an increase by no means in proportion to the increase in population. This showed the restraining effect of the board on the increase in the number of stores. Out of the whole number but two very obscure pharmacies were found in which the law as to registration was not complied with.

### THE TROUBLE IN PATERSON.

W. C. Alpers, secretary of the New Jersey Board of Pharmacy, said that the report of Mr. Perkins had reminded him of the fact that he himself had recently been called upon to investigate the condition of affairs in the town of Paterson and that the only unregistered person he found carrying on business was a lady. The task of disciplining a lady was, he said, a very delicate one, which he wished he could put upon Mr. Cameron, who, to judge from the tribute paid him by Mr. Perkins, seemed an ideal executive officer who would not even flinch from a woman.

The substance of Mr. Alpers' remarks are incorporated in an article on "Enforcing the Law in New Jersey," which appears on another page of this issue.

### DRUGS IN GROCERY STORES.

At the request of the presiding officer, Donald L. Cameron, president of the Kings County Board of Pharmacy, re-

ported the result of his personal investigations as to the manner in which the pharmacy laws were disregarded by the small grocers in East New York, Gravesend and Flatbush. In East New York and Gravesend in particular some excuse existed for this practice on the plea of convenience. In Gravesend in particular there is no drug store at all, and President Cameron said that some of the enterprising members of the society might take advantage of this hint, in response to which suggestion a voice said, "Why don't you take the chance yourself, Mr. Cameron?" No such excuse existed in Blythbourne, Bay Ridge and Fort Hamilton, as these were all amply supplied with drug stores. In one place he found a butcher store on one side of the room, a grocery on the other and a stock of drugs and poisons indiscriminately mixed up with both. On expostulating with the proprietor and telling him of the illegality of this procedure, the proprietor insisted upon Mr. Cameron leaving at once and enforced his request by flourishing a butcher's cleaver. Mr. Cameron then called upon Superintendent of Police McKelvey, who was very courteous and promptly furnished an escort to accompany him in his further expeditions.

### DRUGS IN DEPARTMENT STORES.

In response to a question from Mr. Paradis, Mr. Cameron stated that he had visited Batterman's drug department and asking for a long list of drugs and pharmaceuticals, he found that the only drugs kept by them were 2-grain quinine pills and a few bottles of essence of peppermint, one of which he bought. On inquiring of the girl who seemed to have charge, he was informed that "We did have them, but last week we were told that they were not to be sold." As the "last week" referred to was the week when the notice had been sent out by Superintendent McKelvey, that notice was probably responsible for the order.

At Loeser's he found quinine pills, essence of peppermint and essence of camphor to be the only drugs in stock. At Liebmann's nothing in the way of drugs was found. At Abraham & Straus's he found a full and complete line of drugs, samples of which were purchased for use in possible legal procedure. President Cameron doubted if the law could be made to apply to "patents," and was certain that it would be inexpedient to make any effort in this direction just now.

A special vote of thanks was passed to Mr. Cameron by the society for his excellent work. In the course of the discussion which followed Mr. DeForrest directed attention to the fact that Judge Moore had rendered a decision some years ago in the case of a procedure against grocers for the transgression of the poison law, in which the law was upheld.

Secretary Perkins said that he had been called upon by a salesman of a manufacturing concern who sold large quantities of headache cures, bug cures, &c., to grocers, and that the salesman had told him that he had been referred to the board by the Superintendent of Police to see how far he could go in the sale of his preparations. On being assured by Mr. Perkins that he could not "go" at all, the salesman said that under the circumstances he would have to withdraw the stuff already placed.

On invitation, Mr. Mayo, editor of the AMERICAN DRUGGIST, made a few remarks on the subject of enforcing the

\* See AMERICAN DRUGGIST for May 23, 1895.

laws, and assured the members of the board that their actions had aroused the most widespread interest and commendation on the part of the drug trade all over the United States.

Two members of the Central Labor Union who had requested a hearing at the meeting were invited in and extended the privilege of the floor. The spokesman of the party, M. Raphael, made a plea for the support of the union by the drug trade, his principle argument being that the presence on a box of cigars of the union label was a guarantee that these cigars had been made under proper hygienic conditions, without danger of defilement by leprosy Chinese or other possibly diseased laborers, and was also a guarantee that they were not the product of child labor. He said that all thinking men were agreed upon the ill effects that followed in any population upon the introduction of child labor, and he asked the support of his hearers to a movement which would do away with these ill effects and would aid in giving work to men who are trying to be good and upright citizens, and who as citizens patronized his hearers.

There being no further business the meeting adjourned.

## NEW YORK STATE.

The druggists in Utica have universally agreed to close their stores at 9 p.m. from January 13 to April 1. The proprietors and assistants can appreciate the early closing during the winter months.

R. G. Killner's pharmacy, at 715 Bleeker street, Utica, was closed last month by friends who held chattel mortgages on stock and fixtures. Thos. F. Nugent, Ph.G., formerly with Messrs. John H. Sheehan & Co., purchased the store and is conducting the same. Mr. Nugent's popularity in that part of the city insures for him a successful business career.

The pharmacy of the Allen Drug Company of Geneva, N. Y., was totally destroyed by fire January 28. The loss is estimated at \$5,000. This pharmacy is one of the best known in the northern part of the State. Mr. Allen, the proprietor, was formerly of Malone, and he has the reputation of conducting one of the most reputable businesses in the city of Geneva.

## Maine Commission of Pharmacy.

At the recent meeting of this board, held in Portland, February 12, the following applicants were successful, out of a class of 11: Addison B. Smith, Rockland, Me.; Elbern F. Bowen, Lewiston, Me.; Edwin P. Smart, Augusta, Me.; Herbert C. Holmer, Fort Fairfield, Me. The next meeting of the board will be held in Bangor, Me., Wednesday, April 8, 1896.

## Found It Out Too Late.

A few days ago a Portland druggist's family enjoyed an expensive meal of oysters. In one of the bivalves nine pearls were found. Several of them were of large size, and the head of the family took them to a jeweler, who stated that had they not been cooked, the pearls would have been worth \$500. From this time on all oysters in that family will be thoroughly examined before they go into the chafing dish.

## MASSACHUSETTS.

### Meeting of the Apothecaries' Guild.

#### MEMBERS MEAN BUSINESS.

Boston, February 18.—As indicating the intense interest taken by the members of the Apothecaries' Guild in the movement to regulate prices and suppress the ruinous cutting on proprietary medicines, the largest meeting of druggists ever held in this city took place on Friday, February 7. That the meeting was an earnest one was shown in the way the members stayed until the hour for adjournment, not one leaving the hall for more than three hours. The meeting was in response to a circular letter mailed to every member and to their fellow druggists, and the result was a gathering of nearly 100. C. P. Flynn of South Boston, president of the association, presided, and in opening the meeting congratulated the guild on the bright prospects of success in the drug trade obtaining a uniform schedule of prices. The reports of the secretary and treasurer were accepted, after which a motion was passed that no jobber be admitted to the meeting. It was voted by the Guild that the Executive Committee be instructed not to issue a new friendly list until after the next meeting of the New England Drug Exchange. Letters giving legal opinion favorable to the organization, the existence and work of the Guild, were read by the secretary. S. A. D. Shepard said he was glad the organization has got to a point where some fighting would have to be done. That would show if the members had any sand; that is to say, if they would be willing to put their money in it.

Henry Canning made a long address on the objects and purposes of the organization, and expressed a hope that all members would show that they meant business.

#### RETAILERS OPPOSE THE ADVANCE IN PRICE OF PROPRIETARIES.

George Cobb spoke of the advanced price of proprietary goods. He claimed the manufacturers had not done a wise thing in doing so at this time, especially when the fight of druggists versus cutters is on. He moved that such action be taken by the Guild as shall inform manufacturers who have advanced prices that such advance is detrimental to the interests of the retail trade. The motion was unanimously adopted.

Acting on the suggestion of Mr. Canning that members of the Guild put themselves on record as meaning business. A call for subscriptions was made, and in less than 30 minutes more than \$1,200 was pledged. The sums varied from \$100 to \$10. Previous to adjournment Henry Canning offered the following resolution, which was adopted:

*Resolved*, Our cause is a just one; therefore we hope that the New England Drug Exchange will continue to act as our friend. We hope to be able to announce the names of all the jobbers on our friendly list; but if such be not the case we trust there will remain at least one firm to aid us in our cause. For if there be but one, that one will command the support and sympathy of the retailers in New England.

Officers of the Guild were elected as follows: President, C. P. Flynn; vice-president, W. F. Greene; secretary, George W. Flynn; treasurer, J. G. Godding. Directors: George W. Cobb, East Boston; F. W. Reeves, Cambridge; S. H. Smith, Jamaica Plain; C. A. Charles,

Malden; J. W. Harriman and H. L. Garcelon, Lynn; A. L. Wyman, Boston; T. T. Reed, Roxbury, and N. W. Reeves, Boston. Mr. Reeves was continued as collector of subscriptions for the fund.

### Annual Meeting of the New England Retail Druggists' Union.

Boston, February 21.—At the annual meeting of the New England Retail Druggists' Union to-day, officers were chosen as follows: President, F. M. Harris; secretary, C. P. Flynn; treasurer, W. F. Sawyer; vice-presidents, J. Allen Rice, Massachusetts; D. W. Heseltine, Maine; James Duggan, Connecticut; James O. Hare, Rhode Island; A. W. Higgins, Vermont, and A. L. Wetherell, New Hampshire. There was a lively discussion in regard to cutting, and also about a suit brought by a notorious cutter against Cutler Brothers for alleged boycotting. Ex-Governor John D. Long will defend the firm, and Secretary Flynn told the union to-day that there is reason to think that the cutter will find he cannot buy goods at that house unless he agrees not to reduce the prices.

#### Registered as Pharmacists.

At the February examinations held by the Board of Pharmacy on February 12 to 14, inclusive, 41 applicants appeared. The following named received certificates: James E. Dreul, Harry S. Baker, Fred J. Sheehan, Israel B. Kronberger, Thomas A. Fardon of Boston; William C. Reycroft of Cambridge; Edwin H. Powell of Westfield; George W. Bradshaw of Lawrence; Harvey P. Bush of Pittsfield; William E. Dehey of Northampton; Leo B. Trafton of Melrose; Arthur S. Arthur of Lawrence; James B. Bolton of Fitchburg, and Frank H. Quimby of Milton.

#### Billings, Clapp & Co.

It is announced that Mr. Albion B. Clapp, who has been with the firm of Billings, Clapp & Co., since its establishment in 1857, has retired from the business, owing to the pressure of public and private duties.

While he no longer has any pecuniary interest in it, his good will will remain with the business, which owes its prosperity, in a large degree, to his work as the head of the manufacturing part of the business.

The business will be carried on under the same name as heretofore, and the aggressive policy, which has characterized it in the past, will continue.

#### Personal and Otherwise.

Fred Damon of Holliston will start in the drug business in Sherborn.

A bill has been introduced in the House to restrict the sale of opium.

Charles A. Smith, formerly of Webster, has arranged to open a drug store in Orange.

Thomas F. Godfrey of Northampton is offering his creditors 20 cents on the dollar. He has assigned, owing \$5,500.

A new block has been erected in the northwest part of the city of New Bedford, and Henry T. Colson, well known to the trade, is to open a drug store there.

## PENNSYLVANIA.

PHILADELPHIA, February 20. -- For some time past the professors of the Philadelphia College of Pharmacists have been missing their instruments and a watch was put on the students, but no one was detected in making the pilferings. About three weeks ago the chemistry department was broken into and a set of balances and a book of chemistry stolen. It was discovered that the screen had been torn off the back window and the thief had effected an entrance in this manner. As the balances were good ones and valued at about \$75, it was deemed time to put a stop to these peculations and the matter was placed in the hands of the city detectives. The officers had the matter in charge for over three weeks, and notwithstanding they knew who the culprit was they hesitated to make the arrest as all the evidence they had was circumstantial.

It appears that the thief was formerly an assistant to Professor Trimble, named Gette, who was well known in the college. When he was arrested he denied all knowledge of the theft, but when he was confronted with the evidence he weakened and he is now awaiting his trial by the court. Gette secured entrance to the college by prying off the screen of the window. After he had secured the balance he then climbed over the door of Professor Trimble's room and secured a book on chemistry. Shortly after he had secured the above named articles he tried to dispose of the scales at an assay office in the neighborhood, but as the owner of this establishment was somewhat in doubt as to the usefulness of the scales, the young man went to the scale manufacturer to have them tested, and in this way he was recognized. The trustees of the college intend to press this matter, as it is thought it will be a lesson to all other students who imagine that they can take away any article they so desire.

Wm. McCorkle of Twelfth and Somerset streets has purchased a handsome soda water fountain.

George Y. Wood of Tenth and Spruce streets has decided to keep his store open all night. This is the only drug store south of Chestnut street that has its doors wide open during the full 24 hours.

Smith Bellis of Flemington, N. J., will shortly make a trip to this city to lay in a supply of goods. Mr. Bellis has been connected with the drug business of Flemington for a number of years and is well known and respected in this city.

## Druggist Missing.

NORRISTOWN, Pa., February 16. --The friends here of Howard Lincoln Rayner, a pharmacist, have been informed that he has been missing from New York City for five months. He was a native of this place and a graduate of the Philadelphia College of Pharmacy. He left his home, 669 Second avenue, on the morning of September 16. He appeared at the breakfast table dressed for traveling and informed his wife and father-in-law that he was going to make a short trip into Connecticut. He took with him a small hand satchel and \$500. On September 25 his uncle, who lives in Philadelphia, received a letter from Mr. Rayner, dated at Buffalo. He is a young man, and his wife knows of no reason for his strange absence.

## OHIO.

CINCINNATI, February 17. --The statement of State Senator John Q. Abbott that he had no means with which to employ counsel to defend himself against the charges of bribery brought against him by the Grand Jury caused a considerable sensation, as the Senator was reported to be wealthy. Pharmacists of the State are interested in the case, as the bribery is alleged to have occurred in connection with the passage of the pharmacy act, which was introduced into the Senate by Senator Abbott.

## Heard About Town.

Louis Klayer now has his new pharmacy at Ninth and Elm streets in a good condition.

Druggist Ulen, the Sixth street "pill roller," got some unenviable notoriety last week through the sale of some cocaine to Jackson, the alleged Fort Thomas murderer.

Fire originating from some unknown cause destroyed \$8,000 worth of interior furniture at Burkhart's drug store at 524 Main street at 5.45 last Wednesday morning.

Jacob Kotsin, druggist at Sixth and Mound streets, was arrested last Monday, charged with compounding prescriptions without being registered. He will be tried in the Police Court on the 18th inst.

Secretary Probst of the State Board of Health has sent out warnings to different parts of the State, asking the authorities to be on the outlook for small pox patients. They were expected to arrive at Youngstown.

Julius Hoffman, the clever clerk at Matt Yorston's Central avenue pharmacy, celebrated his twenty-fifth anniversary as an attache of that establishment one day last week. Julius has friends by the score who wish to see him at Yorston's for another quarter of a century.

## MICHIGAN.

DETROIT, February 20. --Local option in Clinton County was last week defeated. A great many reasons are given for the result, and many say that if the measure had been voted on three weeks ago, before the decision of the Supreme Court in regard to conviction of druggists, it would have been carried easily. In this decision the court said that no druggist could be convicted on one complaint which had been proven.

## Local Items.

Oscar W. Smith, who has been connected with Parke, Davis & Co. for a number of years, will hereafter make Baltimore his home. He has gone there to establish a branch house.

Frank W. Blair, formerly a clerk in the drug store of F. Hagerman, at Birmingham, has purchased a stock at St. Louis, Mich., and started in business for himself.

Fire broke out in the basement of E. T. Van Ostrand last week at Allegan, Mich. The stock and fixtures were almost totally destroyed by the heat and smoke. The loss was \$5,000, and was insured for \$4,400.

Carl F. Moll, druggist at Negaunee, will remove his store and stock and fixtures to Hibbing, Mich. He will begin business there on February 20. Moll will be the only druggist there and should do well.

The Eberbach Drug & Chemical Company, at Ann Arbor, have been the victims of petty thieves for a long time. Last week a large standard thermometer was stolen. This makes the third one taken this winter.

A good story is told of a local druggist. It is said that a certain well-known individual called and asked for some morphine to help him out of his trouble. After purchasing the drug he shook hands with the druggist and bid him a tearful good-by. Divining his purpose, the druggist compelled him to disgorge the drug, but only after dire threats.

## ILLINOIS.

CHICAGO, February 21. --The Kidneline Medicine Company have been incorporated, with a capital stock of \$2,500, by Arthur W. Campbell, Frederick W. Packard and John W. Brown. The principal office of the company will be in Chicago.

L. J. Remington, Ralieg, Neb., was in the city last week.

George W. Speers of Vinton, Iowa, spent several days here last week.

O. C. Neumeister of Sheboygan, Wis., who was recently married, passed here on his way to New Orleans, where he and his bride will pass a few weeks.

The Red Cross Hygienic Company have opened new offices at 60 Wabash avenue for their specialties in chemicals and disinfectants.

Eugene Vallens of the well-known house of Vallens & Co., manufacturers of cigars, is at present visiting the Pacific Coast and expects to make a stay there for several weeks.

Mrs. Gervaise Graham, the well-known maker of toilet preparations, left here on February 5 for a business trip through Texas. She expects to be away about 30 days.

A. R. Lewis, representing Johnson & Johnson, returned on the 8th from his Pacific Coast trip, looking well and feeling very jolly, as his sales had been very much larger than those on any trip that he made in previous years. He says that Vito Kolafra is a big winner. Mr. Lewis leaves here on the 20th for a short Eastern trip.

## Illinois College Graduates.

The commencement exercises of the school of pharmacy of Northwestern University was held February 4 at the Auditorium recital hall. There were 47 graduates in this class, which is considered a large number for the winter graduating class. The Grand Opera House orchestra furnished the music. Rev. Thomas A. King opened the exercises with prayer and Prof. E. Wyllis Andrews addressed the class, after which President Henry Wade Rogers conferred the degrees. The dean announced honors and Rev. Thomas A. King pronounced the benediction.

The honors in the senior class were awarded to Frank Runcorn Borden, John



Byrud and John Cuykendall Ordway. The Gilpin, Langdon & Co. prize was awarded to Otis Jesse Benson. The junior class honors went to Francis Berry Beck, Franklin Walter Halbkat, John Wesley Palmer and Charles Alexander Sayre. The Reception Committee was composed of the following: Oscar Brinkman, John A. Caryl, Bruno H. Goll, Jr., Franklin W. Halbkat, Clarence H. Henton, William L. Knuth, Cornelius L. McDermott, Henry W. Pond, Walter L. Sanger and William H. Sweet.

The members of the graduating class are:

Edward Bartz, Otis Benson, C. B. Blanchard, Gregory E. Blish, F. R. Borden, R. V. Bresaid, P. C. Brines, Fred J. Brown, John Butcher, John Byrud, W. L. Campbell, John W. Dick, Ira E. Evans, J. M. Farnsworth, F. Forsyth, Jr., Vincent A. Fox, T. L. Gerner, Frank E. Giller, Albert C. Grant, B. Greenwell, Henry A. Gries, Hugh O. Jones, A. E. Kuhn, John L. McRae, O. E. Marshall, H. H. McDougal, W. E. Mercer, H. F. Miller, Don M. Munger, John C. Ordway, A. L. Orr, Fred E. Palmer, W. M. Patterson, F. W. Patterson, H. H. Pinney, Otto Rohrlack, A. E. Rutherford, John M. Seaman, Mary E. Seaman, F. P. Siebel, A. Z. Sourwine, D. J. Sullivan, C. E. Sufton, Earle C. Swan, F. P. Theller, Elanathan Town, C. M. Turnquist.

The above class includes the largest number of midwinter graduates yet recorded at the university.

## MISSOURI.

### DRUG CLERKS' MONTHLY MEET.

The regular monthly meeting of the St. Louis Drug Clerks' Society was held at the College of Pharmacy building, on Thursday evening, February 18. The secretary was instructed to write a letter to our representatives at Washington, asking them to support the bill proposed by the A. Ph. A., for the advancement of the pharmacist in the army and navy. It was also decided to secure a different hall in which to hold their meetings, and a committee was appointed to look after same. More copies of the constitution and by-laws will be struck off for distribution. The Entertainment Committee reported that they were making arrangements for two boat excursions this summer. The following names were proposed for membership: O. F. Bousch, F. L. Whelpley, P. H. Fischer, G. W. Stiehl, A. V. Marquardt, W. A. Webster, J. C. Thumser, A. C. Stoffer, R. C. Eckert, T. R. Runge, W. F. German, T. J. Poppitz and H. D. Spork.

### A LECTURE ON THE PRESCRIPTION.

Prof. Hemm delivered his annual lecture on the Prescription to a large audience of pharmacy and medical students. The lecture was given at the College of Pharmacy Building. He gave a short history of the well known sign which decorates the blank, and then devoted two hours to giving the boys practical pointers and advice which they could not have obtained by weeks of reading.

### THE ANNUAL MEETING OF THE ALUMNI ASSOCIATION

of the St. Louis College of Pharmacy was held at the college building on the evening of the 18th inst. Over 50 members were present. After the routine business was disposed of the election of officers was taken up, which resulted as follows:

President, Theo. F. Hagenow; first vice-president, R. S. Vitt; second vice-president, F. C. Pauley; recording secretary, Z. A. Seitz; corresponding secretary, Paul Schneider; registrar, L. H. Behrens; treasurer, Chas. Gietner. Executive Committee, to serve three years:

Oscar Bausch and Otto Clause; to serve two years—caused by Mr. Hagenow's resignation—Ambrose Mueller.

### A Decision in the Hoff Malt Extract Case.

Decision has been rendered by Judge Cox in the United States Circuit Court in the suit brought by the West Virginia Corporation, Johann Hoff vs. Tarrant & Co., for accounting, damages and to prohibit them from the use of the label under which they have been selling the Malt Extract, for which they have been agents since 1869. Tarrant's was the original Hoff's Malt Extract, introduced into the United States in 1866 by Leopold Hoff, which was sold in 1868 by Joseph S. Pedersen, acting as Leopold Hoff's agent, and which agency was transferred to Tarrant & Co. in 1869. Briefly the result of the suit is that Eisner & Mendelsohn, or the West Virginia corporation, Johann Hoff failed to obtain an accounting, damages, or an order to prohibit Tarrant & Co. from using the label that they have been using, and the plaintiff has to pay its costs of suit.

The judge, however, was of the opinion that Tarrant & Co. should be required to print the name Leopold before the words Hoff's Malt Extract on their large label, so that the line will read: Leopold Hoff's Malt Extract, and in compliance with the opinion of the court, Tarrant & Co.'s label will in future bear the words: Leopold Hoff's Malt Extract, "Tarrant's," in addition to the signature of Leopold Hoff as manufacturer, which has always appeared there.

The decision in this suit is important, for the reason that it establishes and makes it a matter of court record that the Johann Hoff, for which the Eisner & Mendelsohn Company are selling agents, is a West Virginia corporation, only existing since May 27, 1891, and that it manufactures the article it sells as Johann Hoff'sches Malt Extract, in Newark, N. J., and it also establishes the fact that Tarrant & Co. import the malt extract they sell from Hamburg, Germany, where it is made by Leopold Hoff, who was the original introducer of Hoff's Malt Extract into the United States in 1866.

"The other accusations against the defendant are either unfounded in fact or relate to distinctions so unsubstantial and acts so trivial that the court could not condemn them without denouncing in equally strong, if not stronger terms, the statements not in exact accordance with the truth which from time to time have appeared on the complainants' labels and bottles. In other words, a finding which would compel all the changes asked for would by direct implication require the complainant to hold on the threshold of a court of equity."

### Wholesale Druggists' Prices.

As will be seen by reference to our quotation columns, a number of changes have taken place in the prices charged by wholesale druggists for small lots. The changes are not especially important and we refrain from giving space to an enumeration of them in this column. The more important embrace higher prices for Insect Powder and Cod Liver Oil. The following articles have declined, viz.: Benzoic Acid, Caffeine, Balsam Tolu, Cassia Bark, Pilocarpine Muriate. An addition to our list is Asep-

toline, Edson's, which is quoted at \$14 per dozen in 2-dram vials.

## Review of the Wholesale Market.

NEW YORK, February 22, 1896.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The jobbing houses without exception have been kept busier during the past fortnight than at any time since the year opened. Importers and package dealers, on the other hand, complain of an absence of speculative inquiry, and the policy of caution which has characterized the drug trade for some time past is still in evidence. The annoyance and expense incident to handling small quantities are felt very keenly by both importers and jobbers, and give rise to some complaint. This disposition to purchase in small quantities, and frequently, is very generally referred to as the one flaw in the rebate system as applied to proprietary medicines, and is a constant source of dissatisfaction. The same conditions do not exist, of course, in the wholesale market, but reference is occasionally made to the disposition on the part of many retailers to make small invoices and frequently duplicate them. No feature of special interest has developed in any of the special departments of the general market since our last, and prices for the most part have undergone no great fluctuation. Insect powder continues to reflect a rising market. Advices from the fisheries report a small catch of cod, and the oil is held more firmly and expected to advance. The tone of the market is generally firm, though upon several of the leading staples the advantage appears to be with the consumer.

### ADVANCED.

Insect powder,  
Bleaching powder,  
Gum tragacanth,  
Short buchu leaves,  
Jamaica ginger,  
Verona orris,  
Aleppy cardamon,  
Buckthorn bark,  
Ergot,  
Balsam copaiba.

### DECLINED.

Balsam, Peru,  
Carbolic acid, lbs.,  
Caffeine,  
Guarana,  
Gum chicle,  
Gum asafetida,  
Alexandria senna leaves,  
Naphtholine,  
Opium,  
Quicksilver,  
Jalap,  
Oil cloves,  
Oil myrrbane.

### DRUGS.

Alcohol has remained without any new features, and the demand does not increase beyond normal proportions. The formation of a new distribution company has had no effect on prices, and our quotations represent the market range.

Arnica Flowers have been taken quite liberally by the trade, and the outside quotation has been advanced to 6¼c. to 7c.

Balsam Copaiba is firmer from importers' hands, with Para quoted 87c. to 37¼c., though ordinary quality can still be purchased down to 80c. to 82c.

Balsam Peru is weaker and the demand has not been stimulated by offerings at \$2 to \$2.30 for Hamburg and ordinary respectively.

Balsam Tolu is held at a slight advance

48c. to 50c. being generally required, but trade requirements are of a very limited character, and no transactions of importance have come to the surface.

**Barks.**—Buckthorn has improved in the interval and our quotations show a fractional advance. Cascara Sagrada is well sustained at 3½c. to 4c. for new and 4c. to 4¼c. for old. The article is understood to be in fair supply here though no important quantities are offered to arrive.

**Buchu Leaves**, short, continue in moderate jobbing demand and sales are making at a slight advance over previous quotations, say 12c. to 16c.

**Caffeine** is still quoted somewhat irregularly and the market for the article remains unsettled. In some quarters \$6 is still named as an inside price for quantities, but \$5.75 would doubtless be accepted in others.

**Colocynth Apples** are taken in a slow and indifferent manner by the trade, though there is no pressure to realize. Trieste are maintained quite firmly at 55c. and Spanish at 80c.

**Cod Liver Oil** is offered less freely, and holders are indifferent sellers, with no large transactions to report. As noted elsewhere, this season's catch is likely to be a very poor one, and higher prices will probably prevail. Prime stock is generally held at 49c. to 50c., with up to 55c. and upward asked for fancy brands.

**Ergot** has been developing a higher tendency of late in foreign markets, with the result of strengthening values here for both Spanish and Russian. The range of the market is 15c. to 20c. for Russian and 19c. to 22c. for Spanish.

**Guarana** is being offered rather more freely of late and values have declined, with 60c. to 65c. now generally quoted.

**Insect Flowers** are in stronger position, influenced by reports of higher prices in the foreign markets. Supplies here do not offer below 17c. to 18c. Powdered is steady, with 28c. to 26c. quoted firmly, according to brand and quantity.

**Lavender Flowers** have been in better demand of late, with numerous small sales reported within the range of 2½c. to 7c., according to quantity.

**Menthol** is offered more freely and sales are making in some instances down to the point of \$4, though \$4.15 to \$4.25 is still quoted.

**Morphine** continues quiet, and only a limited demand is experienced. Nothing is openly offered below \$1.50, though rumors of sales below this figure are common.

**Opium** remains in a dull and unsatisfactory condition. Quotations are irregular and the market is characterized by an undertone of weakness. Single cases have been sold down to \$1.95, and no sales are reported at above \$1.97½. The jobbing price remains at \$2.05 to \$2.10, with powdered quoted \$2.25 to \$2.55.

**Quinine** shows no action of any importance, the market, so far as this article is concerned, being dull and lifeless. Prices are without change. Manufacturers' agents still quote 80c. for P. & W. and 28c. for odd brands. Foreign, in bulk, is a trifle irregular, 26c. buying in some instances, though 26½c. to 27c. is the popular quotation.

**Saffron** has developed no new features of interest, though supplies of American are not openly offered at less than 40c.

The range of \$6.50 to \$7.50 is quoted for Valencia and \$4.75 to \$5.25 for Alicante.

**Senna Leaves** are reported higher in the foreign market, but the range here is without change, being about 6c. to 15c. Alexandria is firmer and quoted 14c. to 25c., with a great scarcity of true grades reported.

**Vanilla Beans** are maintained in strong position and the demand of late has improved; \$6 to \$12 will buy whole, and \$5.50 to \$6 is asked for Mexican cuts.

#### DYE-STUFFS.

**Aniline Salt** has sold freely in the interval, several large lots changing hands at 12c. to 18c.

**Cutch** has been in better demand and several large sales are reported, mostly at 4¼c. to 4¾c. for bales, and 5c. to 5¼c. for boxes.

**Gambier** is not quotable higher but the market is firmer in tone, with spot lots offering at 4¼c. Quotations on forward shipments are placed as high as 4¼c. for sail and 4¼c. for steamers.

**Indigo** continues in fair steady demand, with sales making at previous prices.

**Nutgalls** have continued in good demand, with sales at 18c. to 18½c. on the spot.

**Sumac** continues in fair active demand at a slightly higher range. Sales of Sicily are reported at \$48 to \$50, and of Virginia at from \$38 to \$38.50.

#### CHEMICALS.

**Arsenic, White**, has hardened a trifle in the interval and up to 7c. has been asked for small quantities, with the range quoted 6c. to 7c.

**Bleaching Powder** has been in demand and is a shade firmer, say \$1.87½ to \$2.

**Blue Vitrol** at less than 8¼c. in carload lots is scarce at the moment and with demand running fairly prices remain quite steady.

**Borax** is without important change. As a rule, receivers ask 5½c. for concentrated and 6c. for California refined, in carload lots, but these figures are being shaded ½c. to ¼c. in some quarters.

**Brimstone**, crude, is in fair supply here and purchases can be made at \$15.25 for unmixed seconds and \$15 for thirds. The same prices were quoted for lots to arrive.

**Chlorate Potash** is still obtainable from second hands at under 19¼c. on spot or for early shipment. Importers, however, are very firm, with a lower quotation than 9¼c. the exception on any delivery.

**Cream Tartar** is offering from second hands at about ¼c. under manufacturers' prices, but the supplies offering are in exceedingly small lots. The quotations from manufacturers remain at 27c. to 27½c.

**Nitrate Soda** is well sustained at the previous range of, say, \$1.72½ to \$1.75.

**Tartaric Acid**, crystals, is not offered from second hands below 82½c. Manufacturers are very firm and ask 89c. to 83¼c., for crystals, and 82½c. to 83¼c. for powdered.

**Quicksilver** is easier in tone, and we quote the range a fraction less, say 50c. to 51c.

#### ESSENTIAL OILS.

**Anise** continues in fair jobbing demand and steady, with sales at \$2.60.

**Cissia** continues quiet, with the price ruling steady at \$2.50 to \$2.80.

**Citronella** meets with steady fair in

quiry and values are well sustained at the range of 47½c. to 50c. for drums.

**Myrbane** is slightly easier and 18c. will now buy.

**Peppermint** continues quiet, without, however, any noticeable pressure to realize on the part of holders.

**Spearmint** is maintained at \$2 to \$2.25, with the demand moderate at this range.

**Wintergreen** is maintained at full previous values. Supplies of new are not coming forward as rapidly as was expected. Our quotation of \$1.25 to \$1.30 still holds.

#### GUMS.

**Aloe** remained quiet at nominally unchanged prices.

**Asafetida** continues inquired for but values are weak, owing to heavy offerings in the foreign market. Prime quality may be obtained at 14c. to 15c. and ordinary at 12c. to 13c., on the spot.

**Chicle** has been in good demand with numerous large sales reported at 86c.

**Senegal** and other arabic gums are stiffening in value and an advance all along the line is anticipated by dealers.

**Tragacanth** is firmer and a slight advance is asked in some instances over the quoted range.

In other gums there is nothing new or interesting to report.

#### ROOTS.

**Alkanet** is in steady moderate request and sales are making at a slight advance, say 5c. to 5½c.

**Althea** is firmly sustained in view of a slight scarcity, and we quote the range at a slight advance over previous figures.

**Gentian** is held with noticeable firmness at 4¼c., for spot goods. The available supply in this market is small, and this, coupled with the fact that the import cost is relatively higher than local jobbing prices, serves to sustain values.

**Ginger** is selling fairly within the range of 16c. to 18c. and 17½c. to 19c. for unbleached and bleached respectively, according to quality.

**Ipecac** is meeting with some attention, but prices are nominally unchanged, the extremes of \$1.80 to \$1.40 being still quoted. The foreign market is reported firmer.

**Jalap** is dull and neglected at the moment and supplies are offering freely at 14c. to 15c. for Mexican.

**Orris**, Verona, meets with moderate attention, and with generally small stocks the price is maintained at 15c. to 17c. Florentine is held and selling fairly at 21c. to 22c.

**Sarsaparilla**, Mexican, has weakened to 5¼c., with only a limited demand experienced.

#### SEEDS.

**Canary** continues quiet, but the market appears steady in tone at 2½c. to 2¾c. for Symrna and Sicily respectively.

**Caraway** is steady, with 6¼c. the estimated lay down cost.

**Celery** is generally held at 12½c. to 13c., though some holders are willing to sell at 12c.

**Hemp**, Russian, is maintained at 2¼c. to 2½c., as to quantities, with a moderate business reported.

**Rape** is offering more freely and 2¼c. to 2½c. will buy.

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## LEADING ARTICLES.

"Leaves from a Formulary" (p. 147) contains several valuable formulas well worth preserving and utilizing. On the same page the series of articles on the military pharmacist is continued, the regulations governing the service in Norway being set forth.

"How Roentgen Rays Are Made" and the "Pharmaceutical Preparations of Kola Nut" (p. 149) are of special interest at the moment.

"The Identification of Narcotic Extracts" (p. 151) is an eminently practical note from the German.

"Laboratory Notes" and "Opium Assaying" (p. 152) show that there is a growing interest in accurate assay work.

"Tablet Triturate Incompatibilities" (p. 153) is another arrangement of the tablet triturate makers by C. S. N. Hallberg.

"Cigars and Tobacco in the Drug Store" (p. 156) is an article full of pertinent suggestions to the business man.

## CORRECTION.

In the report of the lecture on the "Examination of Urine by Pharmacists," printed in our last issue, the following corrections should be made: Under the heading "quantity" on page 151, the first line of the second paragraph should read: "In disease the urine is usually increased, particularly in diabetes," etc. Under "urea and its estimation" on page 116 read "or about 500 grains" instead of 500 ounces.

## ARE STILLS LIABLE TO TAX?

THE question of the liability of stills used by pharmacists for the purification of water by distillation and the recovery of alcohol from percolates has been raised in Ohio by the Excise authorities of that district. A pharmacist in Columbus exhibited in his window a distillatory apparatus, consisting of a Liebig condenser and flask receiver, such as is generally used by pharmaceutical chemists for condensing purposes, and the Deputy Collector of the district ordered its removal on the ground that the pharmacist had no right to use a still of any sort without first securing from the Government a license.

## DRUGGISTS' STILLS TAX-FREE.

The officer who ordered the removal of the pharmacist's still was evidently new to his duties and unfamiliar with the Government ruling on the subject, which is that stills of not more than 5 gallons capacity used by pharmacists for the distillation of water or the reclamation of alcohol from drug percolates are free from tax, providing the owner of such still notifies the Excise authorities of the district before he uses it.

## THE OHIO PURE FOOD LAW.

IN the address of the president of the Alumni Association of the Cincinnati College of Pharmacy, calling for a special meeting, the following very severe arraignment of the existing pure food law appears: "Wishing as we do, more than all others concerned, the utmost purity and reliability of drugs, we cannot fail to see that, after a trial of two years under the present law, at least the present application of the same is a complete failure in every sense of the word. Not only is it a complete failure, but also a continual source of worry and fear to every honest pharmacist; a disgrace to and a slur at the intelligence of the citizens of this State. The very fundamental principles of law are directly contrary to this so-called pure drug act, which I base on the fact that no act

requiring an impossibility shall be accepted as law or can be enacted as such. And, furthermore, the first requirements in the application of law certainly must be that the officers who are to apply them also understand them. . . . In summary, we have, therefore, a law requiring impossibilities in the hands of the people who know nothing about them. Certainly a fine predicament for the pharmacists of the State to find themselves, their honor, ability and honesty in. It is, therefore, time that a halt be called to this wanton destruction of good name and reputation of the pharmacists of this State, and this sham of a crusade for pure drugs be changed, so that we may not have a pure drug act in name only, but one which will give pure drugs, if they are not such. One which will tend to find and punish those who foster that which every honest pharmacist despises and will declare the most criminal of all acts, that of adulteration and sophistication in drugs."

It is not to be supposed that all the pharmacists of one of the most enlightened and progressive of the States are deserving of the opprobrium which is being cast upon them through the enforcement of the pure food law, and the practical failure of the law after two years' trial is one of the best and most conclusive evidences that it is impracticable to enforce it.

**AMENDMENTS PROPOSED.** The high standing of the men who are prominent in the agitation in favor of an amendment to the law is of itself practically a guarantee of the justice of their cause. At a meeting of Cincinnati pharmacists, which is reported in full in our news columns, several amendments to the act of March 20, 1884 (the pure food law), were proposed. In substance these amendments were as follows:

Druggists to be permitted to sell drugs for commercial purposes, for household use, the arts and those used in manufacturing and which are not required to be chemically pure and not obliged to conform to the standard of the United States Pharmacopoeia so long as they labeled

such drugs as commercial drugs. To avoid the danger that lies in the evaporation and, therefore, the deterioration of drugs to the vendor of them, the committee suggested the insertion of the word "materially" in the second paragraph of the existing law, so that where such deterioration has taken place without the knowledge or intent of the druggist and the drug when analyzed should not come up to the required standard of the Pharmacopœia, it could be shown to a jury that such deterioration was not with an intent on the part of a druggist to adulterate his goods, and that the difference is not material enough to injure or harm.

Lastly, the committee suggested a clause requiring that the food commissioner or his agent, when purchasing samples for analysis, be compelled to leave one-half of such sample with the druggist selling it, the same being placed in an envelope or vial properly sealed by such agent or food commissioner, so that the druggist, if dissatisfied with the analysis made by the official chemist, could have his own analysis made from the sample in his possession.

These amendments seem to be eminently just, and when introduced into the Legislature should receive the active support of every druggist in the State.

#### AMERICAN TRADE IN BRITISH COLONIES.

**R**EPLIES to a circular issued recently by the Hon. JOSEPH CHAMBERLAIN, British Secretary of State for the Colonies, having for its object the collection of statistics as to the extent to which foreign have displaced British imports in the colonies, reveals the interesting fact that American manufacturers of pharmaceutical goods have succeeded in New Zealand, at least, in establishing a trade for articles which are manufactured in Great Britain. The reasons why New Zealanders prefer to deal with American firms are stated as follows in a letter received by the Colonial Secretary from R. H. Bakewell, M.D., of Devonport, Auckland, New Zealand, under date of December 6, 1895. Dr. Bakewell says:

It is impossible to deny that foreigners, more particularly the Americans and Germans, have succeeded in establishing a trade here for articles which are manufactured in the United Kingdom.

And then he advances the following as reasons for the above statement:

1. The greater activity, energy and enterprise with which the foreigners push their trade.
2. That they supply articles as good as the British at a lower price, and better articles at the same price.
3. That they more readily adapt their manufactures to the special wants of colonists.

Further on in his letter, which is printed in full in a recent issue of the *Chemist and Druggist*, he speaks of the

methods employed by American firms to secure trade. "American wholesale druggists," he says, "send over yearly very well mannered travelers who show us samples of their latest novelties. They ask for no orders, and take none except from the wholesale druggists; but a few days after their visit we receive a very handsome sample box of their preparations, comprising 20 to 30 articles, free of all charges. The value of these boxes I should estimate at from 5 to 10 shillings each, if they were bought from the wholesale houses."

It will readily be seen that this testimony to American enterprise is entirely trustworthy, coming as it does from a source which would naturally be averse to making any concessions as to the growth of American trade; and our manufacturing pharmacists are to be most heartily congratulated upon the most signal though peaceful victory which they have won.

#### PHARMACEUTICAL DEGREES.

**A** GAME of follow-my-leader seems to have been inaugurated in the matter of pharmaceutical degrees, and the result has been the precipitation of a very pretty three-cornered duel before the Legislature of this State, which carries one back to that memorable duel participated in by Mr. Midshipman Easy, the boatswain and the purser.

When the Philadelphia College of Pharmacy decided to confer the degree of Doctor of Pharmacy, the New York college immediately got into line, and the Brooklyn college has now come before the Legislature with a bill to allow that institution also to confer the sonorous title of Doctor of Pharmacy. The introduction of this bill was noted some weeks since in these columns and was immediately followed by the introduction of another bill reading substantially as follows:

That on and after the — day of —, 1896, the degree of Doctor of Pharmacy shall not be conferred in this State before the candidate has filed with the institution conferring it the certificate of the regents that before beginning the first annual pharmaceutical course counted toward the degree, he had passed the regents' examination, or satisfied them that he had a preliminary education fully equivalent thereto.

That he has attended — or more satisfactory courses of — months each, containing at least — consecutive hours' study, in — different calendar years in a pharmaceutical school or college, the standard of which is accepted as satisfactory by the majority of the members of a board composed of one professor from, and appointed by, each pharmaceutical school or college in this State, one member of the State Board of Pharmacy, appointed by that board, and one member of the State Pharmaceutical Association, appointed by said association.

This bill was drafted and is being pushed by an erstwhile professor in the

Brooklyn college who has a grievance against that institution.

While apparently intended to block the way of the Brooklyn college, this bill is not looked upon with unreserved favor by all the members of the New York institution, for while it is a beautiful thing theoretically, some of the New York college members do not altogether relish being placed wholly at the mercy of the State Board of Regents.

While no official utterance on the regents' examination bill has been made by the New York college, this institution sent up a full and influential delegation to Albany to oppose the passage of the bill empowering the Brooklyn college to confer the coveted degree of doctor. In fact the energy and promptness with which the members of the New York college have acted in the matter has been a source of much surprise, more particularly when contrasted with the apathy exhibited concerning matters of more general and serious interest to pharmacists. The degree of Doctor of Pharmacy as yet means nothing. The estimation in which it will be held by the public will depend entirely upon the character and the attainments of those who bear it, and great care should be exercised to avoid cheapening it. The conferring of this degree even by the colleges having such an abundance of means and facilities as have the colleges of Philadelphia and New York has been severely criticised.

While we have no desire to pose as apologists for either of the two institutions, we must say that in this instance the New York college was justified in a large measure in opposing this hasty attempt to secure degree conferring privileges. The Brooklyn College of Pharmacy is a young institution of great promise, but we hardly think its progress has been such as to entitle it to the power of conferring the degree of Doctor of Pharmacy.

The contention that the holder of this degree should be a person of good educational attainment is a right one, and until the faculty of the Brooklyn College of Pharmacy are able to demonstrate that their graduates are qualified in this respect no harm will be done in withholding the privilege.

**T**HE conference of the several pharmacy boards in this State, which was held in Syracuse on March 5, should be, and probably will be, productive of good results. If the various interests represented by the several boards can agree upon some measure simplifying the regulation of pharmacy and providing adequate means for its enforcement, there would probably be but little trouble in securing its enactment. It is high time some step was taken in the direction indicated. The conference is reported in another column.

Written for the  
American Druggist and Pharmaceutical Record.

## LEAVES FROM A FORMULARY.

There are few, if any, pursuits which compel their votaries to lead so sedentary a life as that of the pharmacist or druggist. From early morning until late at night we find the busy apothecary toiling in behalf of suffering humanity. This forced sedentary life probably furnishes the reason why so many of our assistants and clerks are forever seeking change and why lengthy terms of service on the part of the assistants are the exception. This habit of changing one's sphere of work gives the observant clerk an opportunity to note the different methods of work followed in different pharmacies, and enables him to gather new formulas and ideas. Observation of this kind extending over a number of years has enabled the writer to form a good collection of practical formulas, some of which are appended:

## NEUTRALIZING CORDIAL.

I.	
Tinct. rhei. aquos.....	3 ss
Potass. bicarbonate.....	3 j
Ess. menth. piperit.....	gtt. xv
Elixir aromatic, q. s.....	ad. 3 iv
II.	
Rhubarb.....	3 ij
Potass. bicarbonate.....	3 ij
Hydrastis canadensis.....	3 j
Cinnamon bark, Ceylon.....	3 j
White sugar.....	lb. iv
Brandy.....	gal. j
Oil peppermint.....	℥xx

Macerate the rhubarb, hydrastis and cinnamon in four pints of the brandy for six hours. Transfer to a percolator and commence percolation, finishing with the remainder of the brandy. In the percolate dissolve the oil of peppermint and sugar and add the potass. bicarb. lastly in fine powder.

## PURGATIVE BITTERS.

Cascara bark.....	3 xiv
Rhubarb.....	3 xiv
Gentian.....	3 iiss
Zedoary.....	3 iiss
Saffron.....	3 iiss
Alcohol..... (Alcohol, 70; water, 30),	
Water..... ( q. s. ad.....	℥ ij

## ORANGE BITTERS.

Bitter orange peel.....	3 viiss
Cinnamon bark, Ceylon.....	3 x
Potassium carbonate.....	3 x
Sherry wine.....	℥ ij

Macerate for eight days with occasional agitation, filter, and in the filtrate dissolve:

Extract of gentian.....	3 v
Extract of wormwood.....	3 v
Extract of red clover.....	3 v
Extract of cascarella.....	3 v

## ASTRINGENT DIARRHŒA CORDIAL.

Cassara sagrada bark.....	3 ij
Catechu.....	3 iiss
Myrrh.....	3 iiss
Rhubarb.....	3 iiss
Cinnamon bark, Ceylon.....	3 v
Saffron.....	3 v
Zedoary.....	3 j
Sugar, U. S. P.....	3 j
Diluted alcohol, q. s.....	℥ ij

## CHILBLAIN REMEDY.

A French surgeon is loud in his praises of digitalis as an external application for chilblains. He recommends the following formula:

Tincture of digitalis.....	2 parts
Thymol.....	1 part
Rectified spirit.....	Of each.....
Glycerin.....	50 parts

Apply to chilblains thrice daily. For the troublesome itching, the same surgeon recommends the application of tincture of iodine, once every three or four days.

## ELIXIR CALISAYA.

I.	
Calisaya bark.....	ss
Orange bark.....	lb. ij
Tinct. cardamon.....	3 vj
Cinnamon bark.....	3 ij
Glycerin.....	3 xvij
Alcohol, q. s.....	ad. gal. xss

Moisten the powders with a sufficiency of a mixture of glycerin and alcohol and transfer to a percolator. In a separate portion of the alcohol dissolve:

Oil neroli.....	gtt. xij
Oil orange.....	gtt. clxxx

Add this to the moistened powders and start percolation; to the percolate obtained in this way add a syrup composed of:

White sugar.....	lb. xxiv
Water.....	gal. j
Inf. coccus cacti., sufficient to color.	

II.	
Cinchona bark.....	3 ij
Orange bark, sweet.....	3 j
Cinnamon bark, Ceylon.....	3 vj
Angelica seed.....	each.....
Anise seed.....	
Caraway seed.....	
Cochineal.....	
Coriander seed.....	3 vj
Diluted alcohol.....	℥ ij
Simple syrup.....	3 xx
Water, q. s.....	℥ v

Percolate with the diluted alcohol and when the full quantity is obtained add the syrup and water.

## ELIXIR CELERY COMPOUND.

Fluid extract of celery.....	3 j
Fluid extract of cocoa.....	3 j
Fluid extract of kola.....	3 j
Fluid extract of viburnum.....	3 j
Aromatic elixir, q. s.....	ad. ℥

## ELIXIR OF BLACKBERRY ROOT.

Blackberry root.....	3 ij
Cloves.....	3 j
Cinnamon.....	3 j
Simply elixir, q. s.....	ad. ℥

Macerate and percolate with the elixir.

## Cologne Water and Perfumes.

## COLOGNE WATER.

Oil bergamot.....	3 iv
Oil orange.....	3 ij
Oil lavender.....	3 iiss
Oil cassia.....	3 j
Oil asar canadensis.....	3 ss
Tincture orris.....	3 iv
Tincture tolu.....	3 ij
Tincture musk.....	3 ss
Cologne spirit.....	gal. ij

## FLORIDA WATER.

Oil bergamot.....	3 v
Oil lemon.....	3 ij
Oil orange peel.....	3 ij
Oil lavender.....	3 iiss
Oil cloves.....	3 ss
Oil cinnamon.....	3 ss
Oil neroli.....	3 ss
Alcohol.....	gal. iv
Water.....	gal. j

## BAY RUM.

Oil bay.....	3 j
Oil pimenta.....	3 j
Acetic ether.....	3 ij
Alcohol.....	gal. ij
Water.....	gal. iiss
Borax, sufficient to impart a greenish tint.	

## VIOLET POWDER.

Starch.....	lb. ij
Orris root.....	lb.
Oil bergamot.....	℥ xxxv
Oil lemon.....	℥ xxxv
Oil clove.....	℥ xv
Oil neroli.....	℥ xv

## PHARMACISTS IN THE ARMIES AND NAVIES OF THE LEADING EUROPEAN STATES.\*

## XI.

## Norway.

The organization of sanitary matters generally, and of pharmaceutical matters especially, in the Norwegian army, closely resembles that of the Swiss army, the present system having been in force since 1887.

The military service in Norway is on about the same footing as in Switzerland. There are military hospitals, but no military pharmacies.

## ON A PEACE FOOTING.

In peace, only one professional military pharmacist, with the rank of an officer, is employed, and he is stationed with the staff. He is subordinate to the "Chief of Military Sanitary Matters," whose adviser he is in all pharmaceutical matters. Every spring he takes the necessary medicines for the medicine chests of the battalions out of an ordinary pharmacy. These chests are taken to the parade grounds at a distance from a garrison; if their contents do not suffice, medicines are bought in a local pharmacy.

For use in camp, nine sanitary detachments and 45 camp hospitals are formed; pharmacists are only employed for the hospitals, one being employed for each. Besides five pharmacists are employed in the Medical Depot.

## ORGANIZATION OF THE SANITARY CORPS.

The camp pharmacists receive their training during peace. All medical men and pharmacists are taken into the sanitary department, as far as they are fit. It is a separate division of the army, having a Sanitary General at its head. The Sanitary Officers are detailed by the Sanitary General to the various divisions, exercises and hospitals. The Sanitary Troops, commanded by a Sanitary Lieutenant-Colonel, form a corps. Medical men and pharmacists are, during the first year, trained in Recruit Schools for 42 days, and in company drills for 12 days. Then, if the necessary ability has been shown during the exercises, the so-called "Corporal School" of 80 days follows. After they have in the following years served as corporals in the Sanitary Divisions, those who have the diploma of a physician or of a pharmacist, are required to take a six weeks' course in Christiania, whenever this is deemed necessary, and are then made "Sanitary Officers." In peace they are called upon to do duty as sanitary officers. From these the "active sanitary officers" are chosen.

## EDUCATIONAL REQUIREMENTS FOR PHARMACISTS.

For entrance to the pharmaceutical profession the so-called "Intermediate

\* Translated from the *Pharmaceutische Zeitung*, by Otto Hoffmann, A.B., under the direction of Dr. Geo. F. Payne, chairman of the Special Committee of the A. Ph. A. appointed at the Asheville meeting to work for the fuller recognition of pharmacists in the army and navy of the United States. The publication of the series was begun in this journal for September 10 and so far there have appeared descriptions of the position of the pharmacist in the German army (September 10), the German navy (September 25), the Austro-Hungarian service (October 10), the Italian service (October 25), the French service (November 25), the Russian service (December 10), the English service (December 25), the Swiss service (January 10), the Belgian service (January 25) and the Dutch service (February 25).



School" examination, corresponding to fitness for the second class of a German "gymnasium" is required. Three years' experience in a pharmacy, followed by an examination, is required for a clerk.

Then follow one year of clerkship, a year and a half or two years of study at a university, an examination in pharmacy, and finally another clerkship of two years after the examination.



Hemicranin is (*Pharm. Zeit.*) a mixture of 5 parts of phenacetine, 1 part of caffeine and 1 part of citric acid.

Antidiabeticum is a synonym for glycosolvol, which is referred to below, and which should not be confounded with antidiabetin, which has already been described in this journal.

Glycosolvol is, according to the *Pharmaceutische Centralhalle*, a new remedy for diabetes mellitus which has been introduced recently, but so far no information is forthcoming as to its composition.

Gallobromol, which was recommended some few years ago by Lapen in naurasthenic conditions in place of the alkalide bromides, is now recommended by Stein in nervous affections of aspartic character as a sedative.

Aluminum Solder.—The following has been recently recommended: Aluminum 1 part, 10 per cent. phos. tin 1 part, zinc 11 parts, tin 29 parts. It is said to fulfill the requirements demanded so perfectly that it is now generally adopted both in this country and Europe.

Triphenin is the name given by J. Von Mering to a homologue of phenacetine which is obtained by heating paraphenetidine with propionic acid. It melts at 120 degrees C. and is soluble in 2,000 parts of cold water. In doses of 0.5 to 0.6 gm. (7 to 9 grains) it lowers the temperature of the body from 2 to 3 degrees.

Carissin is a glucoside which has been isolated from the bark of the *Carsina ovata*, variety *stolomifera*. It has many resemblances to strophanthin and is described as a poisonous, bitter substance, producing nausea and headache. So far, it has only been produced in an amorphous condition.

Calaya is a remedy which has been recommended by Dr. Maurange for the treatment of malaria and, according to *L'Union Pharmaceutique*, is an extract from the fruit of the *Anneslea Febrifuga*, a leguminous plant. Morange gave this extract in the form of a mixture to the amount of 2 gm. every 2 hours, and reports it as being a valuable antipyretic.

Poisoning by Extract of Fern.—A fatal case of poisoning is reported in Bavaria (*Pharm. Zeit.*), in which death followed the administration of 8 gm. of the extract of fern to a young woman of 80. Death occurred four hours after the injection of the medicine, the patient suffering

from epileptiform cramps. This is the first time that so small a dose is reported of having caused fatal results in an adult.

Formin is a name proposed by MM. Bardet and Laguer for urotropin or hexamethylene tetramin. It is a crystalline powder, easily soluble in water and difficultly soluble in alcohol and alkalies. Formin or urotropin is not toxic in large doses. Readily dissolves uric acid and the urates. In doses of 1 to 1½ drams formin acts as a prompt diuretic. It may also be used in cystitis to prevent the formation of bacteria which follow the ammoniacal fermentation in doses of 1 to 2 gm., amply diluted in water.

To Cure Dandruff.—A physician adopts the following method: He mixed an ounce of sulphur in 2 pints of water, allowed the mixture to stand, frequently agitating for 24 hours, and then poured off the supernatant liquid. He saturated the hair with this aqua sulphuris every morning, and in a few weeks every trace of the dandruff had disappeared, leaving the hair beautifully soft and glossy. He persisted in the treatment for some months, and since he discontinued it nearly two years ago, he has had no return of the troublesome complaint.

The Constituents of Columba.—Hilger, according to the *Apotheker Zeitung*, has carefully examined the chief constituents of columba root, and succeeded in completely separating, in a state of purity, berberine, columbin and columbic acid. Columbin forms white crystals, insoluble in water, cold alcohol or ether, soluble in boiling chloroform, alcohol and ether. It melts at 182 degrees; it is neutral, and does not contain any water of crystallization. Analyses assign to it the formula  $C_{21}H_{21}O_6$ . By the action of hydrochloric acid, a monobasic acid is formed. Columbic acid has the formula  $C_{21}H_{21}O_6$ ,  $H_2O$ .

Guaiacol Ethylene.—This substance (guaiacol-ethylene-ether) ( $CH_3O$ ,  $C_6H_4O$ ,  $C_6H_4O$ ,  $C_6H_4O$ ,  $OCH_3$ ) occurs in yellowish white needles which are readily soluble in alcohol and difficultly so in water, and which melt at 138 to 139 degrees C. Guaiacol ethylene acts in a manner very similar to that of guaiacol itself, but it is odorless and crystalline. It has a very energetic action and is better borne by the stomach than is guaiacol carbonate. The daily dose is from 1 to 2 gm., in doses of from ¼ to 1 gm., in pill or pow-

der form. This remedy is indicated in tuberculosis.

Mercury Iodate is a white amorphous powder, almost insoluble in water; soluble in sodium chloride or potassium iodide solution. Ruhemann uses it in almost all stages of syphilis in the form of intra-parenchymatous injections without any objectionable effect upon the organism. Even in cases of chronic nephritis no secretions of blood or albumin were shown after the injection. He uses the following formula:

Mercury iodate.....	0.12
Potassium iodide.....	0.08
Distilled water.....	10.00

Use 1 to 1½ Pravaz syringefuls every two to four days.

A New Salt of Iron.—A crystalline compound of ferris chloride and nitric oxide has been obtained by V. Thomas by introducing the gas into an ethereal solution of ferris chloride, when the liquid turns black and leaves a syrupy substance on evaporating off the ether. After this has stood for some time it becomes crystalline. The crystals have the following composition:  $FeCl_3 \cdot NO \cdot 2H_2O$ . On evaporating the solution at 60 to 100 degrees the compound is obtained free from water. The salt containing water of crystallization occurs in well formed black crystals; the anhydrous salt forms small yellow colored crystals. Ferrocyanide of potassium produces a white precipitate with the solution (*Apoth. Zeit. Jahr.*, x., 830).

Bismal.—This name is applied to the bismuth salt of the condensation product of gallic acid and formaldehyde, which is described elsewhere in this issue under the title of tannoform. Bismal is obtained by digesting tannoform and freshly precipitated bismuth hydroxide for a long time at a gentle heat and then adding a sufficient quantity of acid to make sure that the combination is complete. This can be determined by the solution of some of the substance in soda solution, for when the reaction is complete the solution will also be complete. Analysis shows that the compound consists of two molecules of methylene and di-gallic acid and three molecules of bismuth hydroxide. The salt occurs as a grayish blue very voluminous powder which is dissolved by alkalides with the production of a yellowish red solution.

The Influence of Alcohol on Mercurous Iodide.—While it is generally understood that alcohol has no influence upon mercuric chloride, Francois (*Comptes Rendus*, 1895, No. 24) states that this is an error. If a small quantity of mercurous chloride is washed with a large quantity of boiling alcohol the color will be observed to change from yellow to green, turning finally to black. By means of a series of experiments which were carried out in the absence of light, Francois determined that the action of the alcohol upon the iodide only ceased when the alcohol contained 0.220 parts of mercurous iodide in 100 parts of alcohol. He therefore found that 1,000 gm. of boiling alcohol decomposed 8.15 gm. of mercurous iodide. If one endeavors to wash mercurous iodide with alcohol, therefore, a portion of the iodide is decomposed and the residue is left richer in mercury.

Infusion of Leeches.—The investigations of Haycraft prove that in the front portion of the body of the leech a peculiar substance is secreted which has a

peculiar property of keeping the blood in a liquid state and thus avoiding coagulation, and in this manner of protecting a patient, when introduced into the blood, against the formation of thrombi in cases of arterial sclerosis, compression or enlargement of the blood vessels. Dr. Eguet of Berne has prepared an infusion of leeches and made a series of physiological experiments as to its anti thrombic effect when injected into guinea pigs. From the effects observed he is convinced that injection of an infusion made from 80 to 90 leeches will be sufficient to protect a man weighing 180 pounds from the formation of thrombi. He states, however, that this protection does not last very long, the length of time depending upon the efficacy of action of the kidneys.

**A Simple Test for the Detection of Albumin in Urine.**—Dr. A. Jolles commends the following reagent as being very delicate and applicable under all conditions for the detection of albumin:

Mercuric chloride.....	10
Succinic acid.....	20
Sodium chloride.....	10
Distilled water.....	500

The test is carried out in the following manner. Four to five ccm. of the filtered urine are acidulated with 1 ccm. of 80 per cent. acetic acid. Four ccm. of the reagent are then added, and the whole shaken together. In another test tube 4 to 5 ccm. of the urine are also acidulated with 1 ccm. of acetic acid and 4 ccm. of distilled water added, and shaken. This second test is made so as to preclude the possibility of attributing to albumin any precipitation which is really due to the presence of mucin which would be precipitated by the acetic acid. By this means traces of albumin may be discovered which cannot be detected by potassium ferrocyanide. The reagent is colorless, which also is an advantage over potassium ferrocyanide.

**The Influence of Various Preservatives on Diphtheria Antitoxin.**—R. Loing has studied the influence of various preservatives on antitoxic serums, and reports (*Pharm. Zeit.*) as follows: With camphor eucalyptol and carbolic acid the serum remains clear; it is slightly clouded by salicylic acid and still more so by thymol. Camphor has no effect upon the microorganisms which develop in the serum, while salicylic acid, carbolic acid, thymol and eucalyptol all either kill or retard the growth of these microorganisms. The influence of the various substances used upon the immunizing power of the serum is shown as follows: An immunizing power of 100 is decreased to 97.25 by carbolic acid, to 96.27 by eucalyptol, to 68.89 by thymol, to 51.81 by excess of thymol and to 56.25 by salicylic acid. From this it would be observed that eucalyptol is almost as useful as is carbolic acid, which is now the most generally used disinfectant. R. Loing has always added 0.4 per cent. of eucalyptol to his serum, and has found that it stood for a very long time unchanged. For stopping the bottles of antitoxin serum he recommends that the corks and bottles be sterilized, and that the corks be treated with hot paraffin.

#### INSECT BITES.

The following new remedy has been sent straight from Accra, on the Gold Coast:

Ammonia water.....	2½ drams
Colloidon.....	50 minims
Salicylic acid.....	5 grains

#### Selected Formulas.

##### A TONIC GLYCERIDE.

The following formula for a quinine and iron tonic (*B. and C. Druggist*) will not upset the stomach in dyspeptic conditions:

Quinine sulphate.....	2 parts
Distilled water.....	} of each a sufficiency.
Diluted sulphuric acid.....	
Ammonia water.....	
Lactic acid.....	2 parts
Calcium lactophosphate.....	6 parts
Iron lactate.....	8 parts
Hot distilled water.....	12 parts
Warm glycerin.....	175 parts

Dissolve the quinine sulphate with a sufficiency of the dilute acid and water, precipitate with the ammonia and wash the precipitate. Dissolve the precipitated quinine in the lactic acid and add to the glycerin, proceed to dissolve the iron lactate and calcium lacto phosphate in the hot distilled water, add to the glycerin and filter. Each dram contains:

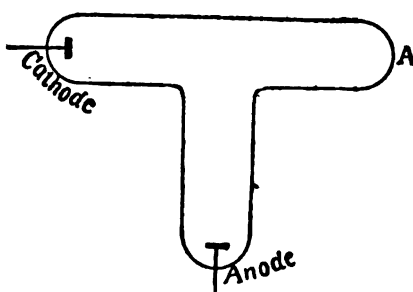
Quinine lactate.....	¼ grain
Iron lactate.....	1 grain
Calcium lactophosphate.....	2½ grains

The solution is of a bright straw color with a pleasant, non-metallic, bitter taste keeps well, and deposits no sediment on standing.

The dose for children under ten is two to three teaspoonfuls daily; for adults the dose is one tablespoonful in water thrice daily after meals.

#### How Roentgen Rays Are Made.

Dr. M. I. Pupin delivered a lecture last Thursday afternoon under the auspices of the Engineering Society of Columbia College on the famous Roentgen rays. Dr. Pupin began by describing the vacuum tubes used in producing the rays. If a high vacuum be produced in a glass tube, and if a current of electricity of exceedingly high tension be passed through this vacuum, a distinct luminosity appears in the tube. The electricity is allowed to enter the tube by means of platinum wires terminating in disks, which are fastened in the glass at each end of the tube.



TUBE USED BY PROFESSOR PUPIN FOR PRODUCING ROENTGEN RAYS.

If the negative terminal—cathode—and the positive terminal—anode—be placed as shown in the diagram, and the luminosity diminished, the luminous rays emanating from the cathode terminal, instead of following the electric circuit to the anode terminal, will pass by it, to the point A, where a fluorescent effect will be produced on the glass. These luminous waves are known as "cathode streamers."

In 1892 Dr. Paul Lenard of Bonn made an opening at that part of the glass where the fluorescence appeared, placed a small piece of aluminum over this open-

ing, and found that the cathode rays passed through the metal and caused a fluorescent effect. Roentgen rays are a kind of continuation of these cathode rays, and are in many respects analogous to them. Roentgen produced a fluorescent screen by a preparation of barium, platino-cyanide and shellac, and found that, by putting his hand over this screen and causing the "Roentgen rays" to stream down from above, a shadow of the hand was produced on the screen.

No substance is absolutely opaque to these rays, but the impression produced depends upon the density of the subject photographed. It was found that these rays could not be reflected or refracted. It is, therefore, useless to use lenses in connection with the experiment. Glass and lead have been found to be practically opaque to the rays. Dr. Pupin showed by lantern slides some photographs he had taken of hands containing shot and bullets, which were indicated with great clearness. In one case, a bullet imbedded in the middle joint of the second finger was shown with startling distinctness.

#### Pharmaceutical Preparations of the Kola Nut.\*

BY JULES JEAN.

The supplement to the Codex (the French Pharmacopoeia), which came into force in January, 1895, mentions the pharmaceutical preparations made from the kola nut, and it is therefore of some interest to determine the quantity of the active principles of the kola (caffeine, theobromine and kolanine) contained in the different products which have thus been placed at the disposal of the physician by the Codex. The studies here recorded have been carried out with a view to formulating the results of a number of observations concerning these preparations. We leave untouched the question of the botany and the therapeutics of kola, since they have been so thoroughly studied in the work of Dr. Heckel, entitled "Les Kolas Africains," and will devote our special attention to the question of the chemistry and pharmacy of the preparations made from it.

#### ANALYSIS OF THE KOLA NUT.

The first analysis of kola nuts is credited to John Attfield (*Pharmaceutical Journal*, 1864), who determined the presence of caffeine (2 per cent.), an essential and a fatty oil (1.52 per cent.), a saccharine gummy substance (6.38 per cent.), cellulose (20 per cent.), starch (42 per cent.) and fixed salts (3.20 per cent.).

In 1884 Dr. Heckel published, in a preliminary report on African kolas, the results of a new analysis showing the following results:

Caffeine.....	2.346	Soluble in chloroform. 2.983
Theobromine.....	0.023	
Tannin.....	0.029	
Fatty bodies.....	0.585	
Tannin.....	1.591	Soluble in alcohol..... 5.826
Kola red.....	1.290	
Glucose.....	2.875	
Fixed salts.....	0.070	
Starch.....	33.754	..... 79.169
Gum.....	8.040	
Coloring matter.....	2.561	
Proteids.....	6.761	
Ash.....	3.325	..... 29.831
Water.....	11.919	
Cellulose.....	20.831	

\* Translated from the *Repertoire de Pharmacie* for the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

These results were confirmed in 1886 by a new analysis published by M. Lascelles-Scott.

MM. Chodat and Chuit, professors in the University of Geneva, have reported the composition of kola nuts which varies materially from that given by M. Heckel.

The following is their report based on examinations, the first being of raw nuts from the Benoué, a tributary of the Niger:

Water.....	11.59
Caffeine and theobromine.....	1.69
Total nitrogen.....	2.10
Proteids.....	10.12
Fatty bodies.....	0.17
Cellulose.....	8.67
Starch.....	46.78
Ash.....	3.81

#### NUTS FROM THE CAMEROON.

Water.....	12.19
Caffeine and theobromine.....	2.34
Fatty bodies.....	0.20
Cellulose.....	15.14
Ash.....	2.93

In practical commercial laboratory work the analysis of kola nuts consists only in the determination of the quantity of caffeine, theobromine and kolanine contained in the sample, the value of the kola being in proportion to its alkaloid content.

In addition to the determination of the alkaloid, we have added the estimation of the extractive matter soluble in 60 per cent alcohol, and of the extract soluble in water. These determinations are necessary for ascertaining the yield of kola in soft extracts and for determining the quality of the tincture which can be obtained from it. For the estimation of the caffeine and of the theobromine we have employed the process recommended by MM. Chodat and Chuit. In this process the kola nut is dried and powdered, is then mixed with milk of lime and is again powdered and again dried in an oven, and this dry powder is then extracted with chloroform. After evaporation of the menstruum a residue is obtained consisting of caffeine, theobromine and a fatty body. This fat is then separated from the alkaloids by the addition of boiling water and filtration; the water, on evaporation, yields as a residue white crystals of caffeine and theobromine which are dried at 105 degrees C. and weighed.

In the following table is presented a summary of the results obtained from analyses of different commercial varieties of the kola nut. The figures are based upon the yield of 100 gm. of the dried powder:

ORIGIN OF SAMPLE.	Caffeine and theobromine	Kolanine.
East Indies.....	1.635	1.416
Congo.....	1.485	1.040
Congo A.....	1.170	1.250
Congo B.....	1.482	0.987
Fresh nuts (water 57.35 per cent.)	0.624	0.294
Dried nuts C.....	1.464	0.609
Dried nuts from Soudan.....	1.330	1.200
Dried nuts from the Niger A.....	1.290	1.208
Dried nuts from the Niger B.....	0.902	0.650
Dried nuts from Sierra Leon A.....	2.273	1.175
Dried nuts from Sierra Leon B.....	2.410	1.209
Damaged nuts.....	2.170	0.135
Moldy nuts.....	1.210	0.067
Moldy nuts.....	2.029	0.181
Nuts from the Ivory Coast.....	1.664	1.300

The average yield of kola nuts is 20 per cent. of extract soluble in water, and from 10 to 12 per cent. of alcoholic extract.

Tasting the alcoholic and aqueous extract is a very important test, as by this means one can distinguish the sound nuts from the damaged ones, which possess a pronounced moldy flavor, and which are therefore not suited for the preparation of medicaments.

#### TINCTURE OF KOLA.

The tincture of kola nut is obtained by macerating 1 part of the powder with 5 parts of 60 per cent. alcohol. In the larger pharmaceutical laboratories the tincture is prepared by successive treatments with alcohol in the proportions indicated.

A tincture obtained from a shop yielded, on analysis, the following results:

Density at 15 degrees C.....	0.922
Dry extractive, per litre.....	21.629
Caffeine and theobromine.....	3.27
Kolanine.....	2.93

M. G. Mercier has reported the following data for a tincture prepared in his own laboratory:

Density at 15 degrees C.....	0.9266
Dry extractive, per litre.....	24.8

A number of samples of tincture of kola prepared on a large scale by successive macerations showed the following composition:

	Specific gravity.	Dry extract, per liter.	Caffeine theobromine.	Kolanine.
A.....	0.9220	22.300	4.500	2.300
B.....	0.9256	23.800	3.700	2.160
C.....	1.9210	21.820	3.980	2.070
D.....	0.9220	21.961	3.875	2.470
E.....	0.9220	22.032	4.306	2.110
F.....	0.9240	23.100	3.400	2.029

Notwithstanding the treatment with alcohol the powdered kola which has been used in the preparation of the tincture yields on further treatment 14 to 18 per cent. of the total amount of the caffeine originally contained in the nuts, and 5 per cent. additional of the total extract soluble in 60 per cent. alcohol.

On the other hand, the tincture contained almost the entire quantity of kolanine; for instance, 100 gm. of the exhausted powder was found to contain 0.0459 of kolanine, whereas in the original examination this powder yielded 1.46 gm. of kolanine per 100.

This fact is of the greatest importance in view of the therapeutic value which has been attributed to the tincture of kola, for the nut does not act solely in proportion to the amount of free caffeine contained in it, but according to the researches of MM. Heckel, Marie, Dubois and Knabel its activity depends principally upon the caffeine in the nascent state, obtained by the decomposition of the kolanine into caffeine and a glucoside under the action of the gastric juices and ferments in the stomach. Kolanine when decomposed furnishes about 61 per cent. of the amount of free caffeine contained in kola.

#### EXTRACTS OF KOLA.

1. Soft extract obtained by exhaustion with distilled water, yielded:

	Per cent.
Caffeine and theobromine.....	6.2
Kolanine.....	traces

2. Soft extract, obtained by distilling off the alcohol from the tincture and concentration of the residue, yielded:

	Per cent.
Caffeine and theobromine.....	8
Kolanine.....	traces

3. The extract of the Codex yielded:

	Per cent.
Caffeine and theobromine.....	6.17
Kolanine.....	5.20

Analysis of the different soft extracts of kola show that the preference must be accorded to the extract obtained by the process given in the Codex, on account of the amount of kolanine contained in it. The only objection which is presented by this extract is its imperfect

solubility in water, which is due to the presence of kolanine.

At first sight, the absence of kolanine in the extract prepared by the concentration of the tincture would seem strange, in view of the fact that alcohol is the best solvent of this principle. The method of preparation, however, readily explains this anomaly. On concentrating the residue after distilling off the alcohol of the tincture, with a view to producing an extract of the desired consistence, the residue is practically divided into two parts, one soluble in water containing the caffeine tannin, gums, glucose, etc., and the other insoluble, containing the kolanine and the resins, which are separated out by filtration, the soluble portion furnishing the soft extract upon concentration.

From these results it will be seen that if it is desired to administer an extract representing in its entirety the active principles, that prepared according to the Codex should be employed as it contains 82 per cent. of the total caffeine present in the kola nut.

#### FLUID EXTRACTS OF KOLA

(*Extraits fluid de Kola au tiers*).

These extracts are obtained by dissolving 1 part of the soft extract in 1 part of water,  $\frac{1}{2}$  part of 90 per cent. alcohol and  $\frac{1}{2}$  part of glycerin.

Two kinds of the fluid extracts are prepared:

1. A fluid extract made by employing the soft extract which is soluble in water. The specific gravity of this fluid extract is 1.142. One hundred gm. contains:

	Per cent.
Alcohol.....(Volume).....	14.85
Extract (dried at 100 degrees C.).....	45.83
Caffeine and theobromine.....	2.65
Kolanine.....	traces

2. Fluid extract prepared from the extract of the Codex. This has a density of 1.142. One hundred gm. of this extract contains:

	Per cent.
Alcohol.....(Volume).....	14.8
Extract (dried at 100 degrees C.).....	47.176
Caffeine and theobromine.....	2.064
Kolanine.....	1.736

I do not think that in preparing the fluid extract the extract of the Codex should be employed, since the mixture of alcohol and glycerin dissolves the kolanine and the resin which makes the extract incompletely soluble in water.

#### GRANULATED KOLA SUGAR.

Six hundred gm. of powdered kola are exhausted with 60 per cent. alcohol; the tincture thus obtained is distilled and the residue evaporated to dryness, taken up with 70 per cent. alcohol, and this solution poured upon a kilo of granulated sugar placed in a warm basin and agitated constantly till dry.

Thus prepared, kola sugar contains 6.48 per mille of caffeine and theobromine and 6.87 of kolanine. The presence of the kolanine prevents this sugar from being perfectly soluble. To obviate this inconvenience we have prepared a granulated kola sugar by treating the soft, soluble extract with alcohol, adding this to the sugar and evaporating it. In this manner we have obtained a sugar soluble in water, but which does not contain any kolanine. We have also endeavored to separate out the gums contained in the tincture and in the extract of kola, since their presence causes the grains of sugar to adhere to each other, and for this purpose we have employed 90 per cent. alco-

hol, which does not take up the insoluble gums, but which only takes up 86 per cent. of the total caffeine contained in the soft extract used.

The results of our study of this subject may be summarized as follows:

1. Pharmacists and physicians should be careful to employ the preparations containing all of the active principles of the kola; that is to say, caffeine, theobromine and kolanine.

2. They should therefore accord the preference to the tincture of kola, because of its richness in alkaloids and because it presents the medicinal qualities of the drug in their most advantageous form.

3. That soft extract which is wholly soluble in water does not fully represent the drug; the extract of the Codex only is normal.

4. The "one to three" fluid extracts (*extraits fluides au tiers*) should be prepared only from the soft extract of the Codex, to the exclusion of the more soluble extract.

### The Identification of Narcotic Extracts.

In consequence of the issuance of an order by the Government directing the pharmacists of Austria to carefully examine all of the more powerful extracts purchased by them, G. Hell & Co. have issued a circular giving the characteristics by which all of the various extracts of the Austrian pharmacopoeia may be identified, and from this circular, which is originally based upon the work published by Kremel, Husemann and others, though later elaborated in their own laboratories, we take the following data concerning the official narcotic extracts of the Austrian pharmacopoeia. While intended originally to apply to the extracts of the Austrian pharmacopoeia, they are in a large measure applicable to the corresponding extracts of our own official work.

#### Extract of Aconite.

The most practical and expeditious identity test for this extract consists in a physiological test, which, even in legal cases, is an important adjunct to the characteristics determined in a chemical way. For carrying out this test 1 cg. of the extract is sufficient. A piece of the extract about the size of a pin's head is placed on a porcelain cover by means of a glass rod, is then spread out somewhat and is brought into contact with the tip of the tongue several times. The taste is at first sharp and burning, but this is followed by a characteristic and long enduring feeling of local anaesthesia on the tip of the tongue. Old, spoiled extract does not show this characteristic.

#### Extract of Belladonna Leaves and Extract of Hyosclamus Leaves.

The two extracts can be differentiated as follows: Dissolve 3 to 5 gm. of the extract in a beaker in 50 to 70 parts of hot water and about 2 gm. of powdered talc and filter through a moistened filter. Shake the clear brown solution three times with successive portions of 10 to 15 ccm. of chloroform or ether and evaporate the ethereal extract in a beaker upon a water bath. Pour about 20 to 30 ccm. of warm water over the residue left after the evaporation of the menstruum and add a few drops of ammonia. Both extracts yield a greenish solution,

but the extract of belladonna produces an intensely green fluorescence, which is not produced by the extract of hyosclamus.

The active principles of both extracts can be detected in the same manner. For this purpose the ether or chloroform extract from an aqueous solution of extract rendered slightly alkaline by ammonia or soda solution, is filtered through a filter composed of a small wad of cotton in the neck of a funnel into a straight walled crystallizing dish. The liquid is evaporated at a temperature not above 35 degrees C. and the residue dried by allowing to stand several hours in an exsiccator. From the dry residue a few fragments are scraped off into a white porcelain dish and rubbed up with a glass rod together with about one and one-half times as much potassium or sodium nitrite and a little concentrated sulphuric acid is then added. The mass thereupon turns yellow, and upon the addition of an excess of aqueous potassa solution gives a violet solution.

#### Extract of Cannabis Indica.

Place about 5 gm. of the extract in a beaker, add a little ether, knead the extract with the ether, pour off the ether into a second beaker and repeat the operation. Allow the combined solutions to stand a few minutes on animal charcoal, which has been previously washed with ether, and then filter. The filtrate, which is of a dark wine yellow to brownish yellow, gives, upon evaporation, a residue of soft resinous consistence, which is soluble in alcohol, ether, chloroform, benzol and carbon disulphide, and which does not saponify upon the addition of potassa solution.

It occasionally shows a low acid number (up to six), but no ether number.

#### Extract of Conium.

Treat about 10 gm. of the extract with hot water, as directed for belladonna extract above. Purify the filtered solution by shaking out with ether; render alkaline by the addition of soda solution, again shake out with ether, separate off the ether and evaporate the ethereal solution in a crystallizing dish. On evaporating at the temperature of the room a very small liquid residue is left of a peculiar characteristic odor resembling that of a mouse's urine. Dissolve this residue in 4 to 5 drops of semi-normal hydrochloric acid and evaporate 1 drop of this solution on an object glass at the temperature of the room. The residue thus obtained consists of double refracting microscopic needle shaped or columnar crystals.

The identity of this extract can also be determined with sufficient accuracy by its odor alone. For this purpose dissolve about 5 gm. of the extract in a small bottle in about the same quantity of water and add 10 ccm. of 10 per cent. soda solution. Stop the bottle well and allow it to stand at a temperature of 20 to 25 degrees for an hour and then note the odor developed. It is advantageous also to conduct at the same time a control experiment with conium herb.

#### Extract of Opium.

Dissolve about 0.1 gm. of the extract in a few cubic centimeters of water in a test tube, acidify with 5 drops of diluted hydrochloric acid and add 1 drop of 10 per cent. ferric chloride solution. An intense blood red color is thereupon produced, which is not taken up by ether

when the solution is shaken with this solvent. The addition of a few drops of potassium ferrocyanide to the red liquid produces an intense blue coloration.

#### Extract of Nux Vomica.

Dissolve a few centigrams of the extract in a porcelain evaporating dish in 70 per cent. alcohol; add 1 to 2 drops of diluted sulphuric acid and evaporate on a water bath. The edges of the residue will develop a violet color more or less merging into red.

Dissolve about 1 gm. of the extract in 15 to 20 ccm. of hot water and about 5 to 6 ccm. of diluted sulphuric acid, add about 1 gm. of powdered talc, and after cooling thoroughly filter through a moistened filter. The result is a clear, light brown solution of the most intensely bitter taste. This solution gives with ammonia a whitish, cheesy precipitate, and also gives a precipitate with yellow and red potassium prussiate and a beautiful orange red precipitate with potassium chromate, which on warming is partially dissolved and partly agglutinates into lumps. On rapidly cooling the test tube in which these experiments have been made by pouring cold water upon it, the precipitate again appears showing the original yellow color. The precipitates are not distinctly crystalline, but assume a distinctively crystalline form only after standing for some time, when well formed crystals may be recognized.

#### Tannoforms.

A new class of bodies has been prepared by Merck which are termed tannoforms, and which consist of combinations between the various characteristic tannins and formaldehyde. These bodies are formed by adding a solution of formaldehyde gas to a purified plant extract containing the plant tannin in the presence of hydrochloric acid. The further nomenclature of the tannoforms depends upon the name of the plant from which the particular tannin is derived.

The condensation product of gallic acid and formaldehyde, which is termed simply tannoform, is made by dissolving 5 gm. of tannin in about 15 kg. of hot water, adding 8 kg. of 30 per cent. formaldehyde, and then adding concentrated hydrochloric acid until no further precipitate is thrown down. This requires about 12 to 15 kg. of acid. The precipitate is then washed with water and dried at a low temperature.

Tannoform occurs as a light pinkish white powder which decomposes at about 380 degrees C. It is dissolved by alcohol but insoluble in all the usual organic solvents; but is soluble in diluted ammonia, soda or potassa solutions, giving a brownish red solution from which it is again precipitated upon the addition of an acid. When warmed with concentrated sulphuric acid it dissolves with a brown color, turning, on further heating, to green, and then to blue. The green, or blue, sulphuric acid solution gives a beautiful blue color with alcohol which on standing some time turns to a wine red and on dilution with soda solution to a grass green color. Tannoform is looked upon as being methylene-ditannin.

Several reports of well known dermatologists indicate that tannoform is a useful and entirely harmless remedy for the treatment of decubitus and of hyperidrosis in all their various forms. One part of tannoform when mixed with four



parts of starch gives most excellent results in soft ulcers, and also in the pruritus vaginæ of diabetic patients. It also has yielded excellent results in the treatment of ozæna. It is used as a dusting powder either alone or when mixed with four parts of starch.

### Laboratory Notes.\*

BY JOHN BARCLAY, B.Sc.

#### LIQUID EXTRACT OF PAREIRA.

The present official method of preparation of the above is unsatisfactory, on account of the partial insolubility of the aqueous extract in the aqueo-alcoholic menstruum and the resulting necessity for filtration, which involves considerable loss.

Instead, therefore, of using 4 parts of the extract of pareira as ordered by the Pharmacopœia, it has been found better to take an equivalent quantity (20 parts) of the root, and from it to prepare an extract by exhausting with a mixture of water 8 parts, and methylated alcohol 1 part, the resulting extract being dissolved in sufficient of the official menstruum (alcohol 1 part and water 8 parts) to make 16 fluid parts. An extract so prepared dissolves completely to form a liquid containing about 20 per cent. of total solid matter. The same result might be obtained by percolating and re-percolating the root with the official menstruum, but the use of methylated alcohol, as above, is found to be more economical.

#### COLOCYNTH PULP.

The estimation of the percentage of ash in the powdered drug is useful in ascertaining its freedom from seeds. The Pharmacographia gives the ash of pulp dried at 100 degrees C. as 11 per cent., of sec. 2.7 per cent. Squire gives for the former 8.6 to 14 per cent., for the latter 2.2 to 4 per cent. The writer found that 212 pounds of peeled apples ground under small edge-running stones, just so long as to crush the pulp without breaking the seeds, yielded 48 pounds of pulp, containing 12 per cent. of ash, and 164 pounds of seeds, containing 2.37 per cent. of ash. This method may, he recommended, be safely used for separating pulp from seeds. Eight samples of pulp obtained from various sources were incinerated, and the results are given below:

#### PERCENTAGE OF ASH CALCULATED ON DRUG DRIED AT 100 DEGREES C.

1.....	12.00	5.....	11.20
2.....	10.10	6.....	11.70
3.....	12.40	7.....	11.70
4.....	11.40	8.....	11.20
Mean of eight samples.....	11.45		
Whole apple.....	4.90		
Seeds.....	2.37		

#### COMPOUND EXTRACT OF COLOCYNTH.

An extract, prepared according to the official formula and dried at 100 degrees C., contains:

	Per cent.
Extract of aloes.....	about 59.6
Scammony.....	about 19.8
Curd soap (dried).....	about 14.9
Cardamoms.....	about 4.5

together with so much of the colocynth used as is soluble in proof spirit.

It might, therefore, be expected that a properly prepared extract would contain

an amount of water-soluble matter equal to that of the extract of aloes and soap used (about 75 per cent.), plus a small percentage due to the colocynth and cardamoms, and that similarly the extract would yield about 20 per cent. to ether, that percentage representing the amount of scammony resin.

Eleven samples of compound extract of colocynth, obtained from various wholesale houses, were examined, with the following results:

#### COMPOUND EXTRACT OF COLOCYNTH.

Moisture.	—Calculated on dry extract.—			
	Ash.	Alkalinity as NaOH.	Soluble in water.	Soluble in ether.
1.. 7.05	4.22	1.10	47.4	14.51
2.. 11.59	6.53	1.81	69.6	18.86
3.. 12.10	5.79	1.08	55.1	15.84
4.. 7.18	6.50	1.88	60.7	18.55
5.. 9.51	4.05	1.89	79.0	29.56
6.. 19.85	5.37	1.53	77.0	15.90
7.. 15.29	6.80	2.41	58.6	12.72
8.. 8.14	5.08	2.28	82.4	16.20
9.. 2.73	6.62	1.45	62.0	9.55
10.. 4.24	6.80	2.70	55.8	22.39
11.. 3.50	3.80	0.37	40.6	6.57

<sup>19</sup>. A very old sample.

<sup>10</sup> and <sup>11</sup>. Dry extracts.

The alkalinity of the ash was taken with a view to arrive at the percentage of soap present. The dried curd soap used in preparing extract No. 10 was found to contain 6.92 per cent. of soda (NaOH), so that the ash of this extract would contain just over 1 per cent. of soda due to the soap; but the total alkalinity as soda of this sample was found to be 2.70; hence more than half of the alkalinity of the ash in the case was due to other ingredients.

It will be seen that there is a very considerable variation among the samples in all the points examined.

This is particularly the case with the ether soluble percentage, which may be regarded as fairly accurately representing the amount of scammony resin present.

The writer expressed his indebtedness to E. W. Mann for assistance given in making the experiments for the notes.

### Opium Assaying.

At the meeting of the Society of Chemical Industry, held in Edinburgh, on the 5th ult., a paper was read by Mr. D. B. Dott, F.R.S.E., E.I.C., on "Opium Assaying." The note was suggested by the papers read at the New York section of the society in March and May of last year. In the main the author concurred in what was there said, and fully admitted the value and importance of the papers and the discussions. His own experience was in harmony with that of the American chemists, that the morphinate of lime and ammonium chloride method was inconstant, deficient and unsatisfactory. Mr. Dott preferred the Teschemacher and Smith process, with some very slight modifications, to the U. S. P. process, excellent though it was, chiefly because there was less loss of morphine in the former; he also thought there was a good deal to be said for his own proof-spirit process. The composition of the ash of the morphine precipitate was discussed, and the conclusion arrived at that the alkaline or basic portion of the mineral matter was so small that no serious error could arise in titrating with acid—at least, not with a genuine opium.

The author agreed with Dr. Squibb and others that the morphine should be dried at 60 to 65 degrees C., so that it might have the composition of the hydrate—i. e., if it was not to be titrated. It was

pointed out that if the B. P. really wanted anhydrous morphine, it should direct the alkaloid to be dried at 110 degrees C., as there could be no meaning in exposing for several hours in a water bath when one could get what he wanted in one hour or less by using an air bath. It was noted that Dr. Squibb and Dr. Geisler had both obtained numbers on drying morphine hydrate, which confirmed the author's contention that the formula was  $B_2(H_2O)_2$ , and not  $BH_2O$ , as was formerly assumed. In any case of doubt as to the purity of the morphine precipitate, it was suggested to divide it into three parts—one to be titrated with standard acid, the second to be washed with baryta water and the insoluble portion weighed, the third to be incinerated and the ash weighed. These corrections ought to be sufficient to give a practically accurate result, even in the case of an adulterated opium.—*Chemist and Druggist.*

### Alkaloidal Chemistry.

A lengthy and important contribution to alkaloidal chemistry appears in the current number of the *Berichte* (1896, 2, 216), by Herr Heffter, who has for some time past been working at the cactus alkaloids. He draws attention to the fact that the formula he originally put forward for pellotine, the alkaloid of *Anhalonium Williamsi*,  $C_{11}H_{11}NO$ , should be  $C_{11}H_{11}NO_2$ , the error having arisen on account of the impossibility of completely purifying the base. He has now analyzed the pure hydrochlorate, and his figures are completely in agreement with the new formula. The base forms a very insoluble compound with mercuric chloride, which enables one to separate it even in dilute solutions. It contains two methoxy groups and a hydroxyl group, forming characteristic acid derivatives—e.g., benzoyl-pellotine. The platinum and gold salts are described and analyzed, and also various other compounds of the alkaloid.

The author then goes on with the description of the alkaloids of *Anhalonium Lewinii*. A good historical account of the alkaloids of the plant is given, and the author then describes methods he has used for isolating them in a state of purity. In this connection he takes the opportunity of expressing his thanks to Messrs. Parke, Davis & Co., for supplying him with a considerable amount of the plant.

Four alkaloids were obtained from this plant, anhalonidine, anhalonine, mezcaline and lophophorine. For the details of purification, etc., we must refer our readers to the original paper, as our space will only permit a short description of the bodies themselves. Mezcaline,  $C_{11}H_{11}NO_2$ , forms small white needles melting at 151 degrees. It is easily soluble in chloroform, alcohol and benzine, sparingly so in ether and petroleum. It is also soluble in water. It forms well defined crystalline salts; the sulphate is  $(C_{11}H_{11}NO_2)_2H_2SO_4 \cdot H_2O$ . Anhalonidine,  $C_{11}H_{11}NO_2$ , forms small yellowish needles, melting at 160 degrees. It is easily soluble in the usual organic solvents, and also in water. Crystalline salts have been prepared, and it has been determined that the alkaloid contains two methoxy groups. Anhalonine,  $C_{11}H_{11}NO_2$ , forms snow white needles, melting at 85.5 degrees (Lewin gave it formerly at 77.5 degrees). A beautifully crystalline hydrochlorate was prepared. The fourth alkaloid is lophophorine,  $C_{11}H_{11}NO_2$ . The

\* Read before the Midland Chemists' Assistants' Association.

+ It will be remembered that in England no tax is paid on methylated alcohol.



free base was not obtained in a crystalline condition, but a well defined crystalline hydrochlorate was obtained.

An important paper also appears as a contribution from Schmidt's laboratory in Marburg University, by Sherman Davis, in No. 12 of the *Apotheker Zeitung*. It deals with the alkaloids of the white lupin. This chemist seems to have proved that the so-called "lupanin" is isomeric with "lupanine." The latter, melting at 99 degrees, having the formula  $C_{12}H_{19}N_3O$  (or double this) is optically inactive, and is the racemic modification, capable of being mesotomized or split up into its optically active components. The dextro-rotary component melts at 44 degrees, and is identical with the dextro lubanin of the white and blue lupin. The optically active components, when dissolved in water, regenerate the optically inactive lupanin (for the terms ending in -in and -ine need no longer exist, one being sufficient); the reactions of the body indicate the formula  $(C_{12}H_{19}N_3O)(C_{12}H_{19}N_3O)$ . This work is a striking example of stereochemical isomerides.—*B. and C. Druggist.*

#### Tablet Triturate Incompatibilities.\*

By C. S. N. HALLBERG,  
Chicago.

Since our presentation of the pharmacotherapeutic relations of the tablet triturates last year there has been in some quarters an awakening to the dangers that threaten medical practice through an extension of this form of medication. Despite the fact that some manufacturers are exploiting the tablets "for all they are worth," they are being severely let alone by many physicians who were at first attracted by this "machine made," "cut and dried," "disease to fit the remedy" plan of "doctoring made easy."

The firm that enjoys the dubious distinction of having first introduced the tablets to the medical profession has replied to our criticism in their "Notes," but instead of answering a single one of the arguments advocated against the tablets, have laboriously endeavored to misrepresent our positions relative to the numbering of tablets. This firm proudly boasts that one of our statements relative to the use of the tablets by physicians, viz: "That they are popularizing the form of self-medication; the tablets now being put up and numbered according to the disorder for which they are recommended," does not apply to its (this firm's) make, but that these observations "are based upon tablets which have gained prominence in the last few years." The statement was based upon the observation that non-medical persons select various combinations of remedies from titles by which these tablets are designated, as indicated by the particular disease for which they are recommended. Furnished with a catalogue containing description of remedies from "absorbent dyspeptic" to "vaginal astringent," it does not require much ingenuity on the part of any fairly intelligent member of the laity "to pick the winner," without paying the physician for making a selection for him.

#### A PROFOUND DISREGARD FOR PHARMACY.

In a recent catalogue issued by a certain firm there are about one thousand formulas, nearly one-half of which are designated by therapeutic titles. Most of

these formulas show either a profound disregard for pharmacy, or a wilful desire to mislead the medical profession. Some of these examples are of a character to bring the dispenser within the pale of the pharmacy law, or an anti-adulteration act. A number of these formulas purport to contain highly volatile liquids, which to anyone the least familiar with pharmacy is shown on its face to be either a physical impossibility to combine in the form of a tablet, or after being combined or prepared, would from their very character rapidly volatilize and leave a more or less inert tablet.

Of this class are tablets containing:

Aromatic spirit of ammonia, 8 grs.; spirit of amon. arom., 5 min.; soda mint, spirit amon. arom., 2 grs.

Camphor combinations, in which the camphor sublimes on the sides of the containers: anodyne; coryza Nos. 1, 2 and 3; Rhinitis and diarrhoea tablets.

Camphorated tincture of opium in the following: astringent comp., 6 min.; No. 2, 5 min.; croup, spasmodic, 5 min.; dyspeptic (fermentative); camphor, 10 min.; throat tablets, 10 min.

Nitro glycerin with tinctures of strophanthus, cactus grandiff, belladonna, digitalis, etc., heart stimulants.

"Inflammatum," about 5 min. of tinctures, including Norwood's veratum viride.

Sun Cholera Mixture, 8 min. each of tinctures of opium, capsicum, rhubarb, and spirit of camphor and of peppermint; 13 min. in one tablet. Will the *Sun* (N. Y.) recognize in this tablet its famous offspring?

It will be said that the medical constituents are present in such proportions as to represent these respective tinctures, spirits, etc.; this is the rankest kind of misrepresentation. But how about preserving nitro-glycerin in the tablet form, or ammoniated tincture of valerian.

The following are specimens of rank incompatibilities and "shot gun mixtures":

#### ANTI ASTHMATIC.

Potass. iodide.	each.....	2 grains
Pot. brom.....	.....	.....
Fl. ext. euphorbia pil.	.....	3 minims
Tinc. lobelia.....	.....	2 minims
Nitro-glycerin.....	.....	1-200 grain

Antiseptic dyspeptic: Pepsin, bismuth and salol.

Cholera infantum.  
Lactopeptin.  
Calomel.  
Bismuth subnit.

#### SALOL.

Zinc sulphocarbonate.

Imagine the advantage of nitro-glycerin with iodides and bromides, or digestive ferments with antiseptic phenol derivatives in the presence of free hydrochloric and lactic acids!

Mercuric chloride, the most sensitive alkaloidal reagent known, is combined with alkaloids and alkaloidal drugs in the following: belladonna comp.; bismuth opium comp.; bronchial No. 2 (merc. iod.); diffusive malarial, "diphtheria and grip"; kali comp.; mercurius comp.

In the following a weak compound of phenol, salol, is combined with hydrochloric acid, producing new compounds, liberating phenol which no doubt in many instances has produced the most serious systemic disturbances if not fatal consequences: bismuth catechu comp.:

Bismuth subnit. salol, each.....	2½ grains
Powd. opium, catechu, each.....	¼ grain
Oil cinnamon.....	¼ minim
Acid hel dil.....	¼ grain

This is without doubt the very worst specimen of a formula that has ever been perpetrated. Similar to these we find:

Hypophosphites with creosote, iron albuminate and arsenic, iron mercury comp. with quinine and strychnine and "Sore Throat": Tr ferric chlor., 5 min., mercuric chloride, 1-64 gr. in each tablet.

Blaud's in which ferrous carbonate is decomposed; also combined with arsenic; chlorodyne with nitro-glycerin, but without any chloroform.

As will be observed from these few examples every well-known pharmaceutical and chemical principle is violated. The fundamental therapeutic principle is also violated. Tablets when not composed of substances to be dissolved before they are administered as "hypodermic tablets," etc., should be combined with such drugs as will exercise their local effect through the viscous vehicle that results from the solution of the sugar, gum, etc., of which the tablet is formed; resinous and disagreeable tasting remedies are therefore not adapted to this form of medication. In the face of this we have tablets intended to be dissolved in the mouth composed of copaiba, aloes, extracts of hellebore, gossypium, ferrous sulphate, Venice turpentine, etc. Are there any remedies so repulsive to the palate?

But as though this was not enough, there are also listed "Blank Tablets," white, yellow and pink presumably to afford the physician an opportunity to try the "color cure" of the celebrated Vienna Institute. This "color therapy" is a relic of the "tabula smaragdina" of Hermes Trismegistus and has never been outranked in the history of charlatanism.

So it will be observed that not content with violating every principle of pharmacy and therapy these tablet manufacturers have also adopted the methods of the "fakirs." How any intelligent physician can countenance or permit himself to be persuaded by these adventurers and mountebanks to use these tablets in his practice passes comprehension.

#### The Shaddock and the Grape Fruit or Forbidden Fruit.

The terms shaddock and grape fruit have been used almost interchangeably by a great many writers, and like almost all popular names there is considerable confusion in their use. In a paper read by Chas. H. Lawall before a recent pharmaceutical meeting of the Philadelphia College of Pharmacy the following explicit and simple explanation of the differences between the two fruits as understood where both grow, was given:

"Shaddock (*Citrus decumana*). This tree bears the largest fruit of the Citrus tribe. It grows to about the same height as the lemon or orange trees, with similar leaves, which are downy on the under surface. The flowers are larger than the orange blossoms, though similar. The fruit is of the shape of a huge orange, measuring 8 to 12 inches in diameter (large ones weigh from 7 to 8 pounds), and is covered with a pithy rind from ¾ to 1 inch in thickness. The membrane that surrounds each 'fig' of the pulpy interior is very bitter, and is much thicker than is the case with the orange. It is customary to carefully avoid this when eating the fruit. As compared with the orange, the fruit is less juicy; a marked difference also exists in the flavor. Two varieties, having respectively red and

\* The Graduate.

white pulp, are known. There is little perceptible difference between them in flavor—the red is the sweeter, the white the more juicy of the two. The peel is candied, and is in great demand among the inhabitants of the West Indies. This fruit should not be confounded with either the grape fruit or forbidden fruit.

"Grape fruit and forbidden fruit. These two trees of the Citrus family are so closely allied as not to be distinguishable in leaf or flower. The fruits are similar in the color of the pulp, which is pale yellowish. The grape fruit looks like a double-sized orange with a lemon-colored rind, while the forbidden fruit, of about the same size and color, is pointed at one end. The flavor of these two fruits is different from that of the orange, and, while they closely resemble each other, the forbidden fruit seems to have more of the shaddock flavor than the grape fruit, which is the more juicy. The rind of the grape fruit is thinner than that of the forbidden fruit, and, while hardly much thicker than the rind of an orange, it is tougher and stronger. These fruits are grown in the West Indies in much less quantity than oranges, but, while not sought after to any great extent for export, command a much larger price proportionately in the local markets. The skin surrounding the segments of the fruit is bitter, as in the case of the shaddock. While the shaddock, grape fruit and forbidden fruit are not equal to the Florida orange in richness of flavor, they are preferred to the West India orange, which is extremely acid."

Mr. Lawall found that a very agreeably flavored syrup could be made from the rind and juice of the grape fruit, which will be noted in the quotation given is not infrequently known as forbidden fruit, this name having been applied to it through a popular superstition in the Middle Ages.

#### A New Arrow Poison.

Professor Leubuscher, of Jena, states (*Centralblatt für innere Medizin*) that he has recently examined a small quantity of an arrow poison brought from Borneo by Professor Kükenthal in 1894. It had been prepared in Long Mari, a village on the northern coast of Borneo, on the Baram River, about 200 English miles from the mouth of that stream. The warrior who had given the specimen to Professor Kükenthal had told him that it was effective only when it was fresh, but had given him no information as to its source, save that it proceeded from a tree concerning which the natives related that the rhinoceros fed on its leaves with impunity, but that, if the beast's dung happened to fall into the water, the fish in the immediate neighborhood became stupefied.

Professor Leubuscher mentions some of the difficulties that beset the investigation of arrow poisons, but adds that, in spite of them, the examination has something more than a theoretical and scientific interest. He mentions as an example the case of strophanthine, found in an arrow poison of Eastern Africa, but now regularly employed in heart diseases. As regards the Borneo specimen, it consisted of about 25 grains of a dry, blackish-brown mass, structureless as examined with the microscope, except that through the black substance ran yellowish streaks here and there, and minute fat globules were to be seen in certain parts of the field. Chemically, says the author, this substance does not

contain a glucoside, but possibly it contains an alkaloid in combination with an acid. He has examined into its physiological action on frogs, rabbits and fishes. He injected a small quantity of a freshly prepared solution beneath the skin of a large frog, *rana temporaria*, and for a few minutes there was no apparent effect. In from eight to ten minutes, however, the animal's movements were perceived to be more sluggish; it lay with its hind legs stretched out at full length, and weak clonic contractions of the muscles of the thigh took place. Irritation gave rise to brisk movements, and there were at no time any phenomena of paralysis. Within two minutes more the frog was dead. Its heart was found pale, bloodless and firmly contracted in systole. A minute amount of the poison, about 0.077 of a grain, was injected into a medium sized rabbit. In the course of 12 minutes the animal became restless; then a few gasps followed and it was dead. In this instance, too, the heart was found contracted, but the systole was not so pronounced as in the case of the frog.

#### CONTRACTS THE VENTRICLES.

Proceeding to a closer study of the poison in its action on the heart, Professor Leubuscher exposed the organ in a frog and injected a small quantity of the material under investigation. After a certain time irregularity of the heart's action was manifest; it seemed as if the blood from the auricles met with difficulty in distending the ventricles. Slowly but powerfully the ventricular wall contracted, and by its slowness the diastole was prolonged. Then arose an irregularity in the contraction of individual portions of the ventricle; sometimes only the apex contracted, and again only the base; the impression was as if peristaltic waves coursed through the muscular structure of the organ. A constantly decreasing part of the cardiac chambers became distended in the diastole, and finally the ventricles stopped in systole, pale, bloodless, and firmly contracted. No irritation could provoke any cardiac movement. The swelling auricles pulsed for a few seconds, and then they too were still.

#### BLOOD PRESSURE LOWERED.

In order to make a more accurate study of the effects on the heart in warm-blooded animals, the author connected a manometer with one carotid of a curarized animal, presumably a rabbit, so that the cardiac movements would be indicated on a rotating tympanum, and a cannula was inserted into the trachea which was to record the respiratory movements on the same strip of paper. Thus the various phases of the poisonous action could be followed. It was observed that in a short time after the injection of the poison the action of the heart became irregular, and that the irregularity increased more and more and was accompanied by a lowering of the blood pressure, which persisted until death took place. No increase of the blood pressure was observed in any of the experiments, even when the action of the poison was prolonged by reason of its having been given in very small doses. In the early stage there was no acceleration of the heart's action, and subsequently the irregularity made it impossible to make satisfactory observations in regard to this point. The poison seemed to have no direct action on the respiration or on the peripheral nerves and muscles. Its

effects on the heart were, in no wise modified by section of the vagi or the use of atropine; it is therefore highly probable that the action of the poison is exerted directly on the organ, and not through the medium of the vagi.

The author's experiments on fishes proved harmless to those animals; from this he concludes that this arrow poison contains no derrid, the poisonous principle of *derris elliptica*, and therefore is probably not identical with the "ipoh," or "siren," described by Lewin as a Borneo arrow poison.

#### Miscellaneous Formulas.\*

##### FOR NAUSEA AND PURGING OR INTESTINAL CATARRH IN CHILDREN.

(DR. TRABANT. *Therap. Monatsh.*)

	Grams.
Infusion of calumba.....	75 or fl. 3 iiss
Bismuth subnitrate.....	3 or gr. xlv
Syrup of orange flowers.....	15 or fl. 3 ss

Take one teaspoonful every two hours.

##### FOR THE NIGHT SWEATS OF PHTHISIS.

I.

(*Rev. Internat. de Med.*)

	Grams.
Fowler's solution.....	8 or 3 j
Tincture of belladonna.....	8 or 3 j
Bitter almond water.....	20 or 3 viiss

Take 15 or 20 drops at about 5 p. m.

II.

	Grams.
Cotoine.....	0.5 or gr. viiss
Distilled water.....	120.0 or fl. 3 iiv
Simple syrup.....	20.0 or 3 v
Alcohol.....	10.0 or 3 iiss

Take a tablespoonful at eight and at ten o'clock every evening.

III.

	Grams.
Chloral hydrate.....	6 or gr. lxxx
Distilled water.....	100 or fl. 3 iij
Alcohol.....	100 or fl. 3 iij

Rub on the body just before going to sleep.

##### TOOTHACHE DROPS.

(PROF. MÉTRAL. *Wien Med. Presse.*)

	Grams.
Tincture of opium.....	30 or 3 ss
Camphor.....	8 or gr. viii
Chloroform.....	24 or 30 min

Put on a piece of wadding and place this in the cavity of the teeth.

##### FOR INFLAMED GUMS.

(*Rev. Int. de Méd.*)

I.

Sodium salicylate.....	3 ij
Distilled water.....	3 x

II.

Borax.....	3 iiss
Sodium salicylate.....	3 iiss
Tincture of myrrh.....	3 ij
Syrup of mulberry.....	3 viiss
Distilled water.....	3 viiss

III.

Potassium chlorate.....	3 j
Cherry laurel water.....	3 iiss
Syrup of marshmallow.....	3 iiv
Decoction of poppy.....	3 xxxiii

IV.

Borax.....	3 j
Sodium bicarbonate.....	3 ij
Distilled water.....	3 l

Either paint the gums or rinse the mouth, as preferred.

##### SALICYLATED PASTE.

(PROF. LASSAR.)

	Parts.
Salicylic acid.....	2
Zinc oxide.....	24
Starch.....	24
Petrolatum.....	60

\*The exact equivalents are not given but merely a convenient approximation retaining the proportions of the original.

This is also called "white paste" (*veisse paste*) and is useful in all forms of eczema.

## RED SULPHUR OINTMENT.

(PROF. LASSAR).

	Parts.
Mercuric sulphate.....	1
Sulphur, sublimed.....	25
Petrolatum.....	100
Oil of bergamot, a sufficient quantity.	

The above is also known as red salve (*rothe salbe*) and is recommended in superficial suppurative eruptions, syphilis, impetigo contagiosa, eczema and acne variformis.

## FOR FROST BITE.

(DR. LASSAR).

	Parts.
Carbolic acid.....	2
Lead ointment.....	40
Lanolin.....	40
Olive oil.....	20
Oil of lavender, a sufficient quantity.	

## CARBOLATED DIACHYLON OINTMENT.

(DR. LASSAR).

	Parts.
Lead plaster.....	50
Petrolatum.....	50
Carbolic acid.....	2

Melt the plaster and the petrolatum together with a gentle heat, and then add the carbolic acid. For use where there is burning or itching of the skin and in pruritus vaginæ.

## OIL ZINC PASTE, OR ZINC OIL.

(DR. LASSAR).

	Parts.
Zinc oxide.....	60
Olive oil.....	40

## NAPHTOL PASTE.

(DR. LASSAR).

	Parts.
Beta naphthol.....	10
Precipitated sulphur.....	50
Petrolatum.....	20
Green soap.....	20

## STRONGER RESORCIN PASTE.

(DR. LASSAR).

	Parts.
Resorcin.....	20
Zinc oxide.....	20
Starch.....	20
Liquid paraffin.....	40

## MILD RESORCIN PASTE.

(DR. LASSAR).

	Parts.
Resorcin.....	10
Zinc oxide.....	25
Starch.....	25
Liquid starch.....	40

## STREONTIUM TOOTH POWDER.

Strontium carbonate.....	55 15 grams
Precipitated sulphur.....	55 6 drops
Perfume.....	

## STREONTIUM TOOTH PASTE.

Strontium carbonate.....	6 grams
Precipitated sulphur.....	3 grams
Castile soap.....	13.50 grams
Perfume.....	6 drops
Glycerin.....	55 q. s.
Mucilage acacia.....	

## Ownership of the Prescription.

A New York pharmacist writes to the paper to settle the ownership of the prescription. "The prescription," he says, "is an order on a druggist for certain medicine, and has been so decided by law. It must be filed as an evidence of the druggist's authority for dispensing the same; this especially applies where the physician finds it necessary to order a poison, such as strychnine, arsenic, morphine, etc. It is, in fact, compulsory. Let an accident happen. What becomes of the druggist? Where is his authority? Some physicians order that

their prescriptions shall not be repeated or a copy given without their consent. In those cases the doctor will write, when necessary to renew the medicines, 'Refill prescription No. —.' In this way the careful physician keeps perfect control of his patient, and there can be no interference with his treatment. In ordinary simple remedies, where no harm can be done, every druggist will give a copy, and in many instances the original, but it is entirely at his own option."

## Bibliography.

**ESSENTIALS OF VEGETABLE PHARMACOLOGY.**—A treatise on structural botany. Designed especially for pharmaceutical and medical students, pharmacists and physicians. By Henry H. Rusby, M.D., Professor of Botany, Physiology and Materia Medica in the College of Pharmacy of the City of New York, and Smith Ely Jelliffe, M.D., Professor of Pharmacology in the College of Pharmacy of the City of New York.

The material contained in this volume of 150 pages is a reprint of articles written by the authors and published some time since in the *Pharmaceutical Era*. The first part of the work is devoted to a consideration of the gross structure, and the second part to a consideration of the minute structure of plants. The authors inform us that this treatise fairly represents the teaching of this portion of the subject as it is carried out in their own class room, and that it fairly presents the relation of morphology and organography to the study of drugs.

The work is amply illustrated, and in fact the numerous illustrations are made to do the duty to a certain extent of verbal explanations, which on account of the limitations under which the work was originally produced were precluded. These limitations are rather unfortunate for the authors since on account of the lack of space, the book takes on somewhat the appearance of a series of definitions. It is true that these definitions are ingeniously woven in with the illustrations, but the brevity of the text is so marked that after all when one has studied the work he finds himself in possession of little more than an extended glossary. This characteristic of the treatise deprives it of that sustained interest which is so essential to arousing the spirit of study in the student. The field covered by the work being one which is essentially a laboratory study any treatise upon the subject should be constructed with a view to guiding and interesting the student and to inciting him to greater enthusiasm in histological work, and we scarcely think that if placed in the hands of the beginner in these studies this book would in its present shape lead the student to learn to think and to observe for himself, and this after all is the essential feature in any treatise which is intended as a text book for use in connection with laboratory work. While the book shows that it is the result of a great deal of careful work, we think that it will scarcely fill the field in as satisfactory a manner as the authors might have made it do but for the limitations previously referred to. As a basis for a more extended treatise we think the work under review will prove of much value, and we have no doubt that the authors themselves will see the advisability of filling out what is now but little more than the skeleton of a text book, however valuable it may have been for the purpose for which it was originally prepared.

**FORMULARY OF NEW REMEDIES.**—By H. Boe quillon-Limousin, with an introduction by Henri Huchard. Seventh edition, revised and enlarged. Paris: J. B. Baillière et Fils, 19 Rue de Hautefeuille, près du Boulevard Saint-Germain. 1896.

We have sufficiently indicated the scope of this excellent little cyclopedia of new remedies and formulas in our notices of the earlier editions, and it only remains to mention a few of the newer additions to materia medica which are described in the present volume. These include: Aïrol, Apolysine, Argonine, Benzacetine, Canabindone, Caseinate of Iron, Citrophene, Cotarnine, Caprohemol, Eudoxine, Ferripyrine, Gallicine, Hemogallol, Hemol, Hypnoacetine, Lysidine, Nosophene, Al-euronate bread, Thalline iodide, Phosphergot, Pixol, Resorbine, Salantol, Salethymol, Tannigen, etc.

Nearly all of the vegetable drugs of recent introduction are described, and the references to their composition and therapeutic properties, as well as dosage, are full and satisfactory. The Formulary will be found exceedingly useful as a reference guide to the newer remedies.

**SIXTEENTH ANNUAL REPORT OF THE UNITED STATES GEOLOGICAL SURVEY TO THE SECRETARY OF THE INTERIOR, 1894-1895.** Charles D. Wolcott, Director. In four parts. Part 3.—Mineral Resources of the United States, 1894, Metallic Products. David T. Day, Chief of Division, Washington, Government Printing Office, 1895.

This volume treats of the metallic products of the United States and together with Part 4 of the same report (which has not yet been received from the Public Printer) will form the direct continuation of the series of reports issued by the United States Geological Survey, under the title of "Mineral Resources of the United States" from 1888 to 1893. The volume contains much that is of direct interest to the mineralogist, while the value of the statistical information given is keenly appreciated by producers in this field. To those interested it will be useful to note that the cost of printing and binding is no longer charged for this book, and the volume may be obtained by making prompt application to a Senator or Representative.

## Our Exchanges.

*The College and Clinical Record* will hereafter be known under the name of *Dunglison's College and Clinical Record*.

*Pharmaceutical Notes*, published by Parke, Davis & Co., Detroit, and mailed free to pharmacists on request, is an interesting publication, which many druggists will find of value.

A new pharmaceutical journal has been started in Montreal under the title *Le Pharmacien Canadien*. The second number contains the first installment of a series of articles on "A Theoretical and Practical Course in Pharmacy," in which is given an interesting historical description of some early pharmacopoeias.

We acknowledge the receipt of a very useful "Pocket Diary and Ready Reference" for 1896, issued by the widely known firm of Burroughs, Wellcome & Co., London. The books are sent to the customers of the house annually free of charge, and are valued for their compactness and the useful notes they contain. The present Diary contains an exceptionally valuable list of "Antidotes for Poisons."

Henry Miles, formerly a partner in the

firm of Lyman, Sons & Co., Montreal, has formed a partnership with Thomas Leeming & Co. of this city in a Montreal house, to be called Leeming, Miles & Co. They will deal in drugs and act as agents. Lyman, Sons & Co. were the proprietors of the *Montreal Pharmaceutical Journal*. Mr. Miles takes that property with him.

The preliminary announcement of the German periodical *Neueste Erfindung*

*Erfindung*, issued by the widely known publishing house of Hartleben of Vienna, holds forth a very attractive promise to its readers for the year. The publication appears 18 times per annum, and contains some 48 pages of reading matter and illustrations in each number. The matter published comprises the whole field of practical and scientific industries, including engineering, electricity, applied chemistry, agriculture, etc., etc.

ple (chrysarobin), derived from Goa powder by treatment with hot benzene, is frequently confounded in commerce with chrysophanic acid. As thus obtained it is still contaminated with some impurities, but corresponds to the requirement of the Pharmacopœia; it can be obtained pure in the form of small yellow scales by repeated crystallization from acetic acid and then has the composition  $C_{12}H_{10}O_7$ . By oxidation chrysarobin is gradually converted into chrysophanic acid,  $C_{12}H_8O_7$ , which latter substance forms deep red solutions with the alkalis; the change of color mentioned in the Pharmacopœia as occurring when chrysarobin dissolved in potassa solution is exposed in a test tube is due to the formation of this acid by absorption of oxygen from the air.

Quinine and Syrup Yerba Santa.—J. C. S. submits the appended prescription, saying he finds some difficulty in dispensing it so as to keep the quinine in a proper state of suspension. He says that the quinine precipitates to an immiscible solid extract when the mixture is allowed to stand. The prescription follows:

Quinia sulph.....gr. xxiv  
Syr. yerba santa.....fl. 3 ii j  
M Sig. Teaspoonful every four or six hours.

The trouble with this prescription is probably due to a deficiency of potassa solution in the syrup. Eriodictyon contains an acrid resin which, unless neutralized by an alkali, reacts with quinine salts to form an insoluble resinous compound, which is thrown down in the form of an immiscible solid extract, as described by our correspondent. We have never experienced any difficulty in preparing a satisfactory mixture of quinine sulphate with syrup yerba santa when the latter was made in conformity with the directions of the National Formulary. It is a fact worth noting that samples of syrup of yerba santa are occasionally found which are distinguished by an excess of alkali, sufficient in fact to decompose the quinine salt and throw down the alkaloid. The trouble in this instance, however, probably arises as stated, and it may be avoided by carefully following the directions of the National Formulary in preparing the syrup.

The Darkening of Syrup Calcii Hypophosphites.—G. B. S. writes: "Kindly explain why syrup calcii hypophosphite turns dark by age? What is the chemical change? Has the dark syrup the same therapeutic properties as the normal compound?"

Assuming that it is the syrup of hypophosphites that is meant here, the darkening complained of is probably due as much as anything else to the kind of sugar employed. At least it has been so explained by some investigators, who trace the darkening to the decomposition of the ultramarine blue used by many sugar refiners for the purpose of imparting the desired bluish white tint to sugar, and the subsequent reaction of this with the salt contained in the syrup. However ingenious this statement may be, however, it would scarcely seem to merit very serious consideration, since the quantity of ultramarine blue in any case is too infinitesimal to bring about any appreciable reaction. The change is much more likely to be caused by direct decomposition of the salts themselves, something which, however, happens less often now than formerly, when citric acid was used as a solvent. As to whether the chemical change alters the



We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of any unusual compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the labels used on packages of the compound should also be sent.

Dr. Ward's Liniment.—C O. I. asks the formula for this article, which he says is used in Minnesota.

We regret our inability to furnish the desired information.

Putz Liquid.—N. D. S.—A formula producing a polishing liquid answering to your requirements is represented by the following:

	Parts.
Oxalic acid.....	1
Iron oxide.....	25
Rotten stone.....	20
Palm oil.....	60
Liquid petrolatum.....	4

The iron oxide may be replaced by Venetian red. Both it and the rotten stone must be absolutely free from gritty particles.

Powder for Tender Feet.—C. L. M.—Perhaps the best application in the condition described would be a powder after the formula proposed by Hager. The following is recommended:

Dried alum.....	1 dram
Salicylic acid.....	1/2 dram
Wheat starch.....	4 drams
Powdered talc.....	1 1/2 ounces

To be applied as a dusting powder.

Aristol.—P. C. C.—The mode of preparing this thymol derivative of iodine was described by L. Borde in the *Reperaire de Pharmacie* as follows:

#### Solution A.

Thymol.....	5 grams
Caustic soda.....	5 grams
Potassium iodide.....	5 grams
Dissolve in	
Distilled water.....	50 ccm.

#### Solution B.

Solution of chlorinated soda.....	260 ccm.
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Solution A is poured into solution B, with constant stirring. The thymol and iodine combination precipitates in about 15 minutes. The precipitate is transferred to a filter, washed with distilled

water and dried. The name is copyrighted and its manufacture is prohibited in this country.

German Names of Domestic Drugs.—T. L. H. writes: "Among my customers are many Germans who inquire for various articles under German names. You would do me a great service by informing me what German book contains such names of drugs, etc., in a compact and complete form."

Hoffmann's "Popular German Names of Domestic Drugs and Medicines," published by the Pharmaceutical Review Publishing Company of Milwaukee, Wis., will be found very useful as a means of interpreting the wants of German speaking customers. It contains an alphabetically arranged list of such domestic remedies as are likely to be asked for by German-Americans.

Tincture of Ferric Chloride with Potassium Chlorate.—H. T.—There is no particular advantage to be gained in adding the tincture of ferric chloride direct to the potassium chlorate in a weak solution of both intended for gargling purposes. It is true that a reaction takes place between both substances in which chlorine is given off in the form of euchlorine, but the same reaction takes place in the presence of a limited quantity of water, though longer deferred, and it will be found on examination that of two solutions prepared separately, one by adding the tincture direct to the salt and the other by adding it to the solution of salt in water, each reacts alike to tests.

Chrysarobin and Chrysophanic Acid.—E. E. F.—Chrysophanic acid and chrysarobin are not identical; the former may be regarded as an oxidation product of the latter. Caspari defines the difference very clearly in his "Treatise on Pharmacy." He says: "This princi-

therapeutic properties of the syrup we cannot say. It would probably be inadvisable to dispense the darkened syrup alone, as appearances count for a great

deal in dispensing such preparations, and many physicians would object to any change in the color of so important a syrup.

cut. The process is a photographic one, so the drawing can be reduced as much as desired. The reduction has a tendency to soften the lines and cover any errors or irregularities in the drawing.

#### THE USE OF CUTS.

When cuts are employed merely for their eye catching qualities, it is not necessary that they be specially adapted to the drug business. Any artistic design will help, if it be artistic. A poor cut is



### Advertising Aid, how, when, and where to Advertise.

PRACTICAL HINTS AND SUGGESTIONS. CRITICISM AND CONSTRUCTION OF ADVERTISEMENTS.

In Charge of Ulysses G. Manning.

The department editor will be pleased to criticize any advertisements submitted and to suggest improvements. Questions answered and advice given. Our readers are cordially invited to avail themselves of this help.

#### ART IN ADVERTISING.

Mankind loves pictures. Pictures appeal universally. They tell so much, tell it so quickly, and tell it in a way that all can understand. Our ancestors wrote in pictures before letters were invented. As art has developed, appreciation has developed, until now old and young, learned and unlettered, like pictures—especially those that tell a story. It is safe to say that no matter how hurriedly the papers and magazines of the day are read, the illustrations are never overlooked. If, in selecting a book, a choice is to be made between an illustrated and an unillustrated one, the average man, woman or child will take the pictures.

The modern advertiser has laid hands on everything that can possibly attract attention or give emphasis to his announcements. Therefore, he has employed art, which can do both. Pictures have two purposes in advertising. One is to attract attention, the other to illustrate and emphasize the text. The picture is best that does both, and occasionally the drawing is in itself so complete as to render words almost superfluous. One of the most striking of recent examples is the advertisement of Wool Soap, now running in most of the magazines.

#### ORIGINAL DRAWINGS EXPENSIVE.

It is out of the power of most retailers to employ cuts to their best advantage, because original drawings cost too much. Stock cuts that will serve to attract attention may be had at moderate cost. Small outline cuts suitable for retail ads. cost, as a rule, from 50 to 75 cents each. Some of the syndicate cuts furnished to newspapers can be had for less, but in many localities are so commonly used as to lose their value. As to the value of cuts in newspaper advertising, much de-

pends on local conditions. If no other advertiser uses them, then even stock cuts may be valuable. If cuts are largely employed by others, stick to type display and save your money. In one place, however, illustration will always be of value to retailers, and that is in their own special printed matter, booklets, circulars, etc. The introduction of process engraving has brought the cost of original cuts within the reach of the smaller advertisers who care to employ them on special occasions.

#### THE KINDS OF ILLUSTRATIONS.

A little information as to the kind of cuts usually employed may be useful. Wood cuts were once largely used, but owing to their cost have been supplanted by "zinc etchings" and "half tones," which are much cheaper and for advertising purposes just as effective. Half tones are made from photographs or wash drawings. Most of the illustrations in the magazines and nearly all of the portraits printed in the AMERICAN DRUGGIST are of this sort. The smallest half tone costs about \$1.50; larger ones from 12 to 20 cents per square inch. They are useful in pamphlets or circulars which are printed at slow speed on smooth paper. Few newspapers can print them satisfactorily, as they are etched only to a very slight depth.

#### ZINC ETCHINGS

can be made from any drawing in black ink which is done in "pure line," that is which contains nothing but dead black and white. The cost of such cuts depends, of course, on what you have to pay your artist. The etching itself costs but little, the minimum price being about 60 cents. Larger cuts cost from 6 to 10 cents per square inch. It is customary in getting out zinc etchings to have the original drawing made two or three times as large as you want the finished



## We Want Husbands

to remember that Toilet Soap is always needed at home, and that the kind needed is not the kind that can be picked up anywhere.

The soap that leaves the skin as perfect as it finds it is the only safe one to use. We offer a bargain in just such soap—as pure as any can be, no matter what it costs. Bought several gross and secured the Jobber's discount.

Regular Price, 15 cts. Our Price, 8 cts.  
Box of three cakes, 20 cts.

Take home a box or two. Your wife will recognize the bargain when she tries the soap.

worse than none. Anything grotesque is also out of place. When in doubt, resort to feminine beauty in some form. A fair woman always attracts, both in and out of a picture. A couple of suggestions for illustrated ads. are given, the cuts being selected from those on hand in the office of the AMERICAN DRUGGIST. They could, of course, be fitted to almost any subject, but are open to the general objection that can always be urged against stock cuts: That the ad. must be written to fit the cut, while it would be far better if the illustration could be made to fit the ad.

#### For Poison Bottles.

The *Spatula* tells us of a far seeing correspondent who advises his fellow druggists to have printed conspicuously on their poison bottles the request: "If intended for suicidal purposes, please shake well and scratch off label before using."



## CIGARS AND TOBACCO IN THE DRUG STORE.\*

By R. B. BAXTER,  
Chicago, Ill.

One of the most fascinating and seductive luxuries to men of this enlightened age is tobacco smoking, and as every man who smokes is more or less interested in its production, my aim is to tell a little about tobacco, its manufacture into cigars, the best way to keep cigars during the summer and winter, and how the retailing of cigars can be done to the best advantage. A few remarks touching



## Sound Advice!

Out-door exercise is good, but exercise and Emulsion of Cod Liver Oil is better. Exercise will be vain if the stomach falters.

Our Emulsion furnishes material for health-building and is easy of digestion. Increases the weight at the time when every ounce of added flesh means an ounce of recovery and renewed strength.

Our Emulsion is always reliable, because always fresh.

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MANNING.

the origin of smoking may interest you. Although the fact has been controverted there can be no doubt that the knowledge of tobacco and its uses came to the rest of the world from America. As the continent of America was opened up and explored it became evident that the consumption of tobacco, especially by smoking, was among the natives a universal and immemorial usage, in many cases bound up with the most significant and solemn tribal ceremonies. The tobacco plant itself was first brought to Europe in 1558 by Francisco Fernandes, a physician, who had been sent by Phillip II. of Spain to investigate the products of

\* From an address delivered before the students of the Chicago College of Pharmacy.

Mexico. While the plant came to Europe through Spain, the habit of smoking it was imitated and spread by English example. During the seventeenth century the indulgence in tobacco spread with marvelous rapidity through all nations, and that in the face of the most resolute opposition of statesmen and priests.

### ACTION OF TOBACCO ON THE NERVOUS SYSTEM.

The action of tobacco on the nervous system is weak and wholly special. It does not put to sleep, but it calms and mollifies the sensibility of the organs. It causes an agreeable condition, during which thought continues lucid, and the capacity for work is not diminished. Such is the attraction it exercises, and which causes it to be sought by so many thinkers and students. Tobacco is to them a help in mental labor. When fatigue begins and the need of a moment's rest is felt; when thought fails to present itself with the usual exactness, and the mind hesitates over the shape to give it, the student, writer or investigator stops, lights his pipe, and soon, by favor of this pleasant narcotic, the thought appears clear and limpid through the bluish cloud in which the smoker has enveloped himself, says the *Popular Science Monthly*. I should make a wrong impression if I left it to be believed that I thought tobacco necessary to mental labor. It becomes so only for those who have contracted the habit of using it, and they can divorce themselves from it without losing their capacity. As a whole, tobacco is harmless to the mind, but it may have a mischievous influence on the health, and may cause serious diseases. Permit me to read you the following clipping:

#### SMOKERS AS FIGHTERS.

"It would be unjust, considering the abuse leveled at tobacco smokers, and how often are they told that tobacco destroys all their energies, not to admit that the success of the Germans in the late Franco Prussian war was at least one feather in the smoker's cap. The Uhlans, who in little parties of three or four trotted gaily in advance and took possession of fortified towns, invariably carried pipes in their mouths. The mayor of each town was ordered to find cigars for everybody before anything else was done. The German troops, it has been averred, thought but little of a scarcity of provisions. They fought as well without dinner as with it, but tobacco was indispensable to them." On the whole, we fear experience shows that a smoking army is capable of greater endurance, and of making greater efforts, than a non-smoking army.

#### TOBACCO AND CONSUMPTION.

Some years ago at a meeting of the British Medical Association, held at Newcastle, Dr. Murray presented a paper on "Snuff-taking, and Its Utility in Preventing Bronchitis and Consumption," in which he took occasion to remark that a habitual smoker seldom or never died of consumption, and that the progress of consumption is not infrequently arrested by the habit of snuff-taking, it seems, is not only of great use in curing catarrh, but is an admirable expedient for preventing it altogether. If, when on a journey, you experience a succession of chills, in due time you may expect an attack of bronchitis, an infiltration of pneumonia, or tubercular plasm, or illness in some other form, each tending to re-

duce the powers of life, and consequently liable to set up consumption in those thus predisposed. Under these circumstances Dr. Murray strongly recommended snuff to be taken in liberal pinches. Tobacco, in fact, is now strongly suspected by the medical profession to have been unjustly abused. The majority of physicians, Dr. Murray stated, when recovering from a common cold, will take snuff themselves to hasten their recovery.

#### WHAT CIGARS ARE MADE FROM.

I will undertake to tell you the kind of tobacco generally used in the making of cigars. First of all comes Havana tobacco, grown on the Island of Cuba, as you all know, the quality depending on what district it comes from. There are several districts noted for their different kinds of Havana.

#### CHARACTERISTICS OF CUBAN-MADE CIGARS.

Regular Cuban work has no binder, but is made with book filler. That is, the leaves of the filler are laid out flat, one on top of the other, like the leaves of a book, before rolling up. The tendency of the moist tobacco is to swell up and burst the binder and wrapper, and many American-made cigars have two binders to prevent this, though some American cigars of better quality have only one. The Cuban cigar makers use the book fillers and no binders, for each leaf of the filler acts as a binder for every other leaf. The cigar with a book-filler draws easier, burns more evenly and holds fire longer than the cheaper cigars. The long filler is made of leaves made nearly the length of the cigar, while the short filler is made up of smaller leaves and clippings. Of course the long filler draws easier and burns more evenly than a short filler. In Havana, cigars are made in four grades of colors. The tobacco is assorted before it goes to the cigar makers. Dark fillers and dark wrappers go together, and light fillers and light wrappers are worked together. A good Havana should hold fire from three to five minutes—some Havanas will not hold fire one minute. Havana tobacco will never burn up by itself, but domestic tobacco will. A light-colored cigar will burn faster than a dark-colored cigar. A domestic cigar smokes better when aged about two or three months. They are apt to taste bitter when fresh, while a Havana cigar is sweeter when smoked nearly new. A domestic cigar smoked fresh is apt to draw together and prevent a draft, while a Havana cigar properly made does not draw together.

#### HOW CIGARS ARE DARKENED.

Some years ago when dark wrappers were in demand, tobacco was put in perforated cases and set over steam pipes for from two to four days; strong, heavy, gummy tobacco requiring the longest time. As you all know, the demand for light colors in clear Havana goods is greater than the supply, although a dark tobacco makes the best smoke and is preferred by good judges. I have often noticed that when a smoker calls for a cigar, the retailer is in the habit of handing out the light colors and quite often the smoker asks for a darker cigar. My opinion is that the retailer ought to hand out the dark cigars first, and they would be taken in a good many instances instead of the lighter ones. This would greatly lessen the trouble retailers have over light colors.

## WEIGHT OF CIGARS.

In the manufacture of cigars the government allows 25 pounds of tobacco for every 1000 cigars, and estimates the waste to be about nine pounds for stems and six pounds for cuttings on wrappers and binders. Cigars average in weight about 10 pounds to the thousand.

## COST OF MAKING, BY HAND AND BY MACHINE.

A cigar that costs about \$8 per thousand and mould work, will cost \$12 made by hand. The cheapest work in a Spanish factory is \$16 per thousand, and goes as high as \$36 per thousand. Prices for work vary according to shape and length. Cuban work has no binder, and a Cuban-made cigar lights easier and does not have a tendency to smoulder.

## THE CARE OF STOCK.

Retailers, as a rule, do not give enough attention to keeping cigars properly, especially during that time of the year when artificial heat is used. When you warm your stores, then is the time to supply your cigars with moisture. They do not need it during the summer months; in fact, the tendency is for cigars to be sold too fresh during that season of the year, because tobacco absorbs moisture from the atmosphere. Cigars made during March and April give better satisfaction during the summer months than fresher goods, especially seed and Havana goods. I have noticed that the best results are procured where shallow pans of water are put under a false bottom. Use strips of wood about half the width of a lath, nailed in cleats, leaving about an inch of space between the strips.

## WHY PLUG TOBACCO IS PUT UP IN HEAVY BOXES.

You may have noticed that plug tobacco is put up in heavy oak boxes, and perhaps you have wondered why such expensive boxing is used. It is because the tobacco absorbs moisture and swells. The pressure would be great enough to burst an ordinary soft wood box, so that the damage from breakage would far exceed the difference in the cost of boxing.

## QUALITIES SUITED TO THE DRUG TRADE.

Right here I may as well speak of the quality best suited to the trade. Always sell the best goods you can buy. That is the only way you can build up trade and hold it. Never have a penny so close to your eye that you cannot see a dollar on the other side. As water is bound to find its level, just so will the consumers find out before long who is giving them the best value for the money. It may take longer sometimes than others, but it is bound to come to this pass. Good goods are bound to be appreciated. By giving good value for the money you will get people in the habit of coming to your store, and of recommending your store to others. That is what you want. Besides, if a man is a regular customer of yours, and you are sure of him, if you sell him good cigars he will smoke more, hence buy more, than if you sold him cigars only a little poorer in quality.

## CAUSE OF SPECKS ON CIGARS.

A word in regard to speckled wrappers. Many people and many old smokers suppose that the cigar with specks on it is the best. This hallucination is harmless but it is foolish. Much tobacco is spoiled every year by worms getting on the leaves while in stock. The specks are

caused by a harmless spray which is applied to the worms. Many druggists help to foster the illusion about the extra fine quality of the speckled wrapper. Meanwhile the man who knows laughs.

Another thing to be kept well in mind is to please the eye of the customer. Keep a large stock and always have your case look attractive. That is the first thing to look out for in all lines of trade. Why is it that good window dressers are in such demand? The man who knows how to make the window of a store look attractive is always sure of plenty of work and a large salary. Just so with the cigar case. Always to have a clean, attractive case is to go a long way toward gaining steady customers. Again, arrange your boxes so that they can be removed easily, and when a customer asks for a cigar take out the box and let him choose for himself.

I will close quoting from Charles Kingsley:

"When all things were made, none were made better than tobacco; to be a lone man's companion; a bachelor's friend, a hungry man's food, a sad man's cordial, a wakeful man's sleep, and a chilly man's fire. . . . There's no herb like unto it under the canopy of heaven."

## BUSINESS LAW.

## Trade-Marks and Trade Names.

A trade-mark is a symbol arbitrarily selected by a manufacturer or dealer and attached to his wares to indicate that they are his wares. In selecting such a device he must avoid words merely descriptive of the article or its qualities, or such as have become so by use in connection with known articles of commerce. He must also avoid words—e. g. geographical names—which are descriptive of the local origin of the goods, if other persons have the right to deal in goods of similar origin. When it has become generally known in the trade that this word or symbol has been taken by one dealer or manufacturer to indicate his goods, he acquires a title to it for that purpose, and no one else can use it even innocently.

A trade name is of a different character. It is descriptive of the manufacturer or dealer himself as much as his own name is, and frequently, like the names of business corporations, includes the name of the place where the business is located. If attached to goods, it is designed to say plainly what a trade-mark only indicates by association and use. The employment of such a name is subject to the same rules which apply to the use of one's own name of birth or baptism. Two persons may bear the same name and each may use it in his business, but not so as to deceive the public and induce customers to mistake one for the other. The use of one's own name is unlawful if exercised fraudulently to attract custom from another bearer of it.

Trade-marks, properly so-called, may be violated by accident or ignorance. The law protects them, nevertheless, as property. Names which are not trade-marks, strictly speaking, may be protected likewise if they are taken with fraudulent intention, and if they are so used as to be likely to effect this intention.

It has been very correctly said that the principle of the decided cases is this:

That no man has the right to sell his own goods as the goods of another. The principle may be expressed in a different form by saying: No man has a right to dress himself in colors, or adopt and bear symbols, to which he has no peculiar or exclusive right, and thus personate another, for the purpose of inducing the public to suppose either that he is that other person or that he is connected with and selling the manufacture of such other person, while he is really selling his own. It is perfectly manifest that to do these things is to commit a fraud, and a very gross fraud.

The right which any person may have to the protection of a court of equity does not depend upon any exclusive right which he may be supposed to have to a particular name or to a particular form of words.

His right is to be protected against fraud, and fraud may be practiced against him by means of a name, though the person practicing it may have a perfect right to use that name, provided he does not accompany its use with such other circumstances as to effect a fraud upon others.

The offense is not merely in duplicating, for similarity not identity is the usual course when one seeks to benefit himself by the good name of another; but in many cases the effect of imitation depends upon the propinquity, especially where the name is one applied to a business or a store, and the similar use would not lead to deception. But it is different where the field of action is a locality, or the commercial world, as in the use of a trade-mark. Though sometimes a name assumed at the formation of a business on a small scale may become important, where the success of the article or the enterprise of the proprietors extends the original limits, and the right to protection will grow with the growth of its reputation and the territory covered by its sale.

## What Constitutes Fixtures.

Chattels must, to constitute them fixtures, be actually annexed to the real estate, or something appurtenant thereto. They need not necessarily be attached to the building. (*Feeder vs. Van Winkle* (Ct. App. N. J.), 83 Atlantic Rep. 899.) That is one way of annexing them to the soil, but not the only way. To satisfy this test, it is not material whether the sub-structure is brick or wood, or whether if machinery, it is annexed to the building, or rests upon a foundation securely laid for it in the soil, and to which it is fastened. The fact that such articles may be removed and sold for other purposes, or that they were not made for special adaptation to the buildings in which they are placed, is not decisive of their character. Those qualities are mere circumstances to be considered. There must be actual annexation with intention to make a permanent accession to the freehold, but it is not necessary that there be an intention to make an annexation perpetually. The intention must exist to incorporate them with the real estate for the uses to which the real estate has been appropriated, and there must be the presence of such facts and circumstances as do not lead to, but repel, the inference that it is intended to be a temporary annexation. Where they and the land become unified and incorporated together as a whole, they are subject to the lien of a mortgage on the real estate.



## NEWS OF THE FORTNIGHT.

### Cut Prices.

Pittsburgh druggists are making an effort to prevent the sale of proprietary remedies by department stores (p. 160), while in Massachusetts the New England Retail Druggists' Union (p. 164) agitates the question of co-operative manufacture of proprietaries. The reports from the Chicago co operative manufacturers are, so far, quite favorable.

### The Trouble in Ohio.

A full report of the agitation against the pure food law appears on page 161. The druggists propose to have the law changed, and are in very grave earnest. The pharmacy law also is to be amended, and the Board of Pharmacy (p. 168) support the amendments.

### Legislative.

Besides the legislative matters referred to above, there is to be reported the continued and growing opposition to the new Massachusetts law (p. 164), a hearing on the amendments to the Rhode Island law (p. 168), opposition to the proposed changes in Iowa (p. 164), opposition to the high license bill proposed for New York State (p. 163) and a conference of the several pharmacy boards of New York State (p. 167).

No decision has yet been rendered in the alcohol tax cases, though the manufacturing interests are putting forth every effort to win their case.

President Cameron of the Brooklyn Board of Pharmacy has lodged a complaint against Abraham & Straus, the large department store, for violation of the law in selling drugs without having a license, and the case is set for trial to-day, March 10. The case will be somewhat in the nature of a test case and its outcome will be awaited with interest.

### Obituary.

James Whitall, head of the widely known house of Whitall, Tatum & Co., is dead, and a brief sketch of his life appears on page 165.

## The Alcohol Rebate.

PHILADELPHIA, March 8.—The bill to repeal Section 61 of the statutes which relates to exempting all manufacturers from paying duty on alcohol has caused considerable discussion in the drug trade, and a number of meetings of the various bodies of druggists have been held. Edward H. Hance, the newly elected president of the Philadelphia Drug Exchange, and who is also chairman of the Committee of Legislation of the National Wholesale Drug Association, with A. H. Jones, chairman of the Committee on Legislation of the Philadelphia Drug Exchange, and Mr. Rogers, chairman of the Committee on Legislation of the New York Board of Trade and Transportation, have had a hearing before the committee which has this bill in charge and it is thought in the trade that there is no doubt but that the druggists should be exempt from paying duty on alcohol, and if all the claims that have been filed are paid that the Government will be compelled to turn over more than \$7,000,000. At the present time there are a number of suits up before the Government, and it is the intention of the drug people to press the Dunlap suit and make it a test case.

Besides trying to sustain Section 61 the druggists are trying to get through the House an amendatory bill in relation to enforcing the above section. While the Secretary of the Treasury has not paid any claims, he has nevertheless not refused to receive them, and it is stated that the reason for not paying them is that he has not had the cash to do it with. On February 21 a special meeting of the Board of Directors of the Philadelphia Drug Exchange was held, and the report of the Committee on Legislation was ordered to be sent to all users of alcohol.

### REPORT OF THE COMMITTEE ON LEGISLATION OF THE PHILADELPHIA DRUG EXCHANGE.

The circular requests the co operation of the recipients, who it is suggested should write to the members of the House of Representatives and of the Senate representing their respective States, as well as to the members of the sub-committee of the Ways and Means Committee at Washington, urging that Section 61 of the act of August, 1894, be made operative and that the accrued claims be paid. The circular confines itself to two lines of argument, the first of which is that the law being an authentic act of Congress should be enforced. The second that accrued claims made under this law should be paid without any demur, since a failure to pay them is a contravention on the part of the officer failing to do so of the law enacted by Congress and

signed by the President. In support of these arguments the act of June 9, 1872, is cited. In this act the insertion of a comma instead of a hyphen between the words "fruit" and "plants," through a clerical error on the part of the engrossing clerk, caused fruits to be placed upon the free list whereas a previous section directed that fruit, green, ripe, or dried, not otherwise provided for, should pay 10 per cent. Although the intention of Congress was clear in this case that "fruit-plants," and not fruits and plants should be entered free, the law was construed literally and for two years fruit was admitted free of duty until the hyphen was substituted for the comma by a special act of Congress.

This instance is cited by the committee as showing how binding the acts of Congress are held to be even where the intention of Congress has been changed by a purely clerical error. The committee, therefore, argue that there is no question but that the intent of Congress is clearly expressed in the Hoar bill, and that its opponents cannot make out even as strong a case against this measure as might have been made out in favor of ignoring the free entry clause of the act of 1872 above referred to.

## Mr. Seabury on Free Alcohol.

The recent press reports regarding the appearance at Washington of a representative of the Western retail druggists who favor the repeal of the Hoar amendment, making alcohol for use in medicine and the arts duty free, has brought out an expression of opinion from George J. Seabury, the President of the New York State Pharmaceutical Association and chairman of the Section on Commercial Interests of the American Pharmaceutical Association. Mr. Seabury thinks that free alcohol would only benefit wholesale liquor compounders and the manufacturers of proprietary remedies which are composed chiefly of alcohol.

"The law," he said, "is particularly obnoxious to the trade interests of pharmacists and would tend to make mere tradesmen of them. From my examination of its probable results, I would, as a practicing pharmacist, decide against free alcohol in medicines. Therefore, I most heartily indorse the sentiments of our Chicago brethren when they state, 'That the safety of the retail drug trade is in the unconditional repeal of the present law on free alcohol in medicines.'"

## Fighting the Cutters in Pittsburgh.

PHILADELPHIA, March 5.—The druggists in this city, both wholesale and retail, are now, and have for some time past been wrestling with a problem the solution of which will mean to them a larger trade and increased profits. This problem is how to prevent the department stores from handling the proprietary preparations—the patent medicines of current fame that have so great a reputation as sure cure remedies for illnesses ranging from the measles and chicken pox to the most dreaded scourge of small pox.

In an interview on this subject, a well-known Pittsburgh druggist said: "The manufacturers of the proprietary remedies will sell to department stores as readily as they will to wholesale or retail druggists. The department stores hav-

ing no prescription department to care for, etc., make specialties of these articles and sell them at a cut price, thereby insuring a ready and quick sale, to the detriment of the trade of the regular pharmacists, for a woman, or a man either, will very often purchase a bottle, even though it may not be needed at the time the purchase is made. The regular trade have for some time been trying to force the makers of these remedies to sell to only the wholesale drug gists who would sell only to the legitimate dealer. One or two firms have agreed to this, but only a few. The Detroit plan is being

advocated in this city, but it is not meeting with much favor."

The druggists of this city, it is said, will leave no stone unturned in their efforts to stamp out this evil, as they are wont to call it. As a last resort they will ascertain if there is not some way of compelling all proprietors of department stores who persist in selling proprietary remedies to hire a registered drug clerk, and those refusing or failing to do so will, in case this end is accomplished, be prosecuted. In the words of the immortal Grant: "They will fight it out on this line if it takes all summer."

## A Hot Fight On in Ohio.

**Cincinnati Druggists Up in Arms—The Cincinnati College Alumni Demand a New Law—Chemist Fennel Invited to Leave a Meeting—President Meininger of the Board of Pharmacy Leading the Opposition—Proposed Amendments to the Pure Food Law—The Whole State Aroused—Cleveland, Columbus, Hamilton, Dayton and Toledo Will Co-operate with Cincinnati—Subscriptions Pouring In—Proposed Amendments to the Law.**

CINCINNATI, OHIO, March 5, 1896.—During the past fortnight drug affairs have not settled down in the least. On the contrary, it may be stated that what promises to be a most desperate fight has been inaugurated against the obnoxious Food and Dairy law in so far as it has to do with the pharmacists of Ohio. Two meetings have been held by local druggists, and they may be fittingly described as of the Tabasco sauce order. Charges and counter charges were thrown right and left by those in attendance, and it was feared that certain parties would come to blows. A more odious law than the one in question could not be framed. That portion of it which gives the Food and Dairy Commissioner the legal right to arrest druggists for the sale of adulterations and impurities is characterized by local pharmacists as tyrannical and without reason. Every article kept in the shops, no matter whether it be used in manufacturing, the arts or otherwise, is supposed to conform to the requirements of the Pharmacopoeia, and if it does not the dealer can be arrested and paraded before the public as a criminal. Twenty cases have been brought, and as stated in the last issue the druggists are all worked up over the crusade.

### ORGANIZED OPPOSITION TO THE PURE FOOD LAWS.

A few days since President Frank Freericks of the Cincinnati College of Pharmacy Alumni sent out circulars denouncing the Food and Dairy laws, and asking the recipients to be at the college building on Wednesday, February 26. The circular read as follows:

CINCINNATI, OHIO, February 22, 1896.

TO THE MEMBERS OF THE ALUMNI ASSOCIATION OF THE CINCINNATI COLLEGE OF PHARMACY—Gentlemen: In accordance with the obligation accepted by me as president of your association, I again deem it necessary to call attention to the so-called pure-drug crusade at present carried on by the Ohio Pure Food and Dairy Commission. Wishing, as we do, more than all others concerned, the utmost purity and reliability of drugs, we cannot fail to see that, after a trial of two years under the present law, at least the present application of the same is a complete failure in every sense of the word. Not only is it a complete failure, but also a continual source of worry and fear to every honest pharmacist; a disgrace to and a slur at the intelligence of the citizens of this State. The very fundamental principles of law are directly contrary to this so-called pure-drug act, which I base on the fact that no act requir-

ing an impossibility shall be accepted as law or can be enacted as such. And, furthermore, the first requirements in the application of law certainly must be that the officers who are to apply them also understand them.

Looking over that part of the law as titled "An act to provide against the adulteration of food and drugs," which pertains to drugs, we find: "Section 3. An article shall be deemed to be adulterated within the meaning of this act, (a) in the case of drugs, (1) if when sold under or by a name recognized in the United States Pharmacopoeia it differs from standard of strength, quality, or purity laid down herein; (2) if when sold under or by a name not recognized in the United States Pharmacopoeia, but which is found in some other pharmacopoeia or other standard works on materia medica, it differs materially from the standard of strength, quality, or purity laid down in such work, etc."

### CAUSTIC CRITICISM.

The Ohio pure-drug law is, in other words, the U. S. P. or some other standard work. That the requirements of the U. S. P. are often impossible to attain cannot be disputed. Therefore, if that which the law requires is often impossible, the law itself must be impossible. This law, then, in the hands of a Pure Food and Dairy Commission, calling attention to the name, is the pure-drug law of the State of Ohio. What is a Pure Food and Dairy Commission to know about the U. S. P., and what do they know according to their own acknowledgment? Nothing. In summary, we have, therefore, a law requiring impossibilities in the hands of people who know nothing about them. Certainly a fine predicament for the pharmacists of the State to find themselves, their honor, ability and honesty in. It is, therefore, time that a halt be called to this wanton destruction of good name and reputation of the pharmacists of this State, and this sham of a crusade for pure drugs be changed, so that we may not have a pure-drug act in name only, but one which will give pure drugs if they are not such. One which will tend to find and punish those who foster that which every honest pharmacist despises and will declare the most criminal of all acts, that of adulteration and sophistication in drugs.

For this purpose, then, do I call a special meeting of the Alumni Association of the C. C. of P. on Tuesday, February 25, at 2:30 p.m., so that we, representing the Cincinnati College of Pharmacy, may be the means of bringing about throughout the State a movement for the enactment of a truly pure-drug law. In other words, proceed to bring about an amendment to the present law at this session of the Legislature. As we only have about another month in which to bring this about, with the positive knowledge of at least two years more of the present unjust hardship if it is not done, I hope that this may be a warning to all, so that on next Tuesday all may appear to show a united front for pure drugs, and preserve our rights as American citizens.

Respectfully yours,

FRANK H. FREERICKS.

### PHARMACISTS PROTEST.

In response to this call about 40 of the representative druggists of the city appeared at the College of Pharmacy Build-

ing on Court street, near Wesley avenue. President Freericks presided at the meeting, and stated the object of the gathering. In his speech he denounced the laws in question and the way in which they are enforced. Others who spoke in the same strain were A. L. Boehmer, Alfred De Lang, Charles Freericks, Andy Diebold and Otto Rauchfuss. After the speeches it was sought by the chairman to discover the feeling of those present toward the Food and Dairy laws by a vote. Before a vote could be taken, however, Prof. Charles T. P. Fennel, the chemist for the Food and Dairy Commission, who was present, jumped to his feet and stated that none but members of the Alumni should be allowed to vote. This brought on a heated controversy between Messrs. Freericks and Fennel, as a number of druggists were present who were not members of the Alumni. The matter was finally settled by an adjournment. None of those present left the hall, however, and the gathering then became one of druggists of the city of Cincinnati. More speeches were made denouncing the laws in question, and a committee of five was appointed to draft amendments to the laws and devise ways and means of having them enacted at this meeting of the General Assembly at Columbus. The following druggists were appointed as members of the committee: Otto Rauchfuss, Frank Freericks, Alfred De Lang, Albert Vogeler and Albert Wettersroem.

### PROF. FENNEL INVITED TO LEAVE.

These gentlemen were instructed to prepare amendments and to present them at a meeting of druggists at the Odd Fellows' Building, at Seventh and Elm streets, on Saturday, February 29. This meeting was well attended, and the proceedings were of a most interesting character. Prof. Charles T. P. Fennel, the official chemist for the Food and Dairy Commission of the Southern District of Ohio, was on hand early, and had a seat well up in front. The meeting was called to order at 8 o'clock, and the first business transacted was the election of Albert Meininger as president and A. E. Diebold as secretary. Before the minutes of the last meeting were read Frank Freericks offered a resolution that those present who had not been invited be asked to retire from the hall. The intent of this resolution could not be misunderstood, and brought Prof. Fennel to his feet. He said that he was under the impression that the meeting was to be an open one, and that he had a right to be there. The announcement was received in silence, and Mr. Freericks' motion being seconded, was unanimously adopted. Prof. Fennel then asked for a rising vote, at which about one-half of those present rose. When the nays were asked for only two responded, and Prof. Fennel without another word picked up his hat and left the hall.

### MR. MEININGER'S VIEWS ON THE SITUATION.

As a preamble to the business before the meeting President Meininger said that the time had come for the druggists to take a bold stand against the obnoxious drug laws under which the druggists throughout the State have been suffering, and which made criminals of men under conditions which were beyond their control. It is not the intention of any druggist in the State, Mr. Meininger said, to evade the law, but as it stood it was within the range of possibi-



ties for any one to conform to it to the letter and escape punishment, no matter how innocent he might be of criminal intent. All that druggists want, continued the speaker, is equity; there is no desire to evade the law or to dodge it.

Judging from the applause with which these remarks were greeted by those present it seemed to be the consensus of opinion of the meeting, and Chairman Alfred De Lang rose to explain what the committee had accomplished to that end. He stated that he and his colleagues had called upon Hon. F. S. Spiegel and retained him as the attorney for the temporary association, and that under his advice the committee had drawn the amendments which they desired to submit, and which, after having been approved by the association, would be framed in the required legal verbiage and every effort made to effect their passage.

#### TO AMEND THE LAWS.

The substance of this report of the committee is given in the editorial columns.

After the reading of the report the rules were suspended and a general discussion followed, the committee explaining the various points desired to be gained by the proposed amendments. It was not until the last clause was reached that any objection was made. To this Mr. Alfred Vogeler objected on the ground that it might be construed that a slur was thrown upon the Commissioner or his agents, and that the Legislature might frown upon such an insinuation, not intended. To this Mr. Freericks replied that the druggists were entirely at the mercy of the Commissioner, and as long as the State employed Tom, Dick, or Harry the druggist ought to have some defense by which he could prove his innocence if a mistake should be made. The discussion finally ended with the approval of the report, with the power given to the committee to submit the same to the attorney of the association for correction and revision, and to act at once in the matter looking to their passage.

HAMILTON, DAYTON, COLUMBUS, TOLEDO AND CLEVELAND DRUGGISTS' INDORSE CINCINNATI'S ACTION.

When the debate upon the subject closed President Meininger stated that he had been assured the co-operation of every druggist in the city, in Hamilton, Dayton and Columbus, and Mr. Freericks read letters from Messrs. Burkhardt of Dayton, Burn of Columbus, Bauer of Toledo, and Rosewater of Cleveland, in which the writers declared that all the druggists of the cities named would heartily indorse any action their Cincinnati colleagues would adopt to change existing conditions. President Meininger also called attention to the fact that Food Commissioner McNeal was again a candidate for the position, and that in all likelihood he would have a competitor in Representative Blackburn, who, he said, was a man broad minded enough to enforce the present law equitably, without stooping to trivial technicalities which the framers of that measure never contemplated. He also urged those present to watch the Shrylock bill, the pharmacy bill and other measures now pending in the Legislature which would affect their interests.

#### FUNDS LIBERALLY SUBSCRIBED.

At the conclusion of the president's remarks, Chairman De Lang rose to state that money would be required to pay the

expenses incident to the passage of the bill, and suggested that the funds be raised by the subscriptions of those present, and that a committee be appointed to solicit aid from the druggists not present at the meeting and merchants whose interests were allied with them. The suggestion was readily received, and Alfred Vogeler, for the firm of Stein & Vogeler, and Samuel Hale, for the firm of Hale, Justis & Co., at once subscribed \$50 each. Their example was quickly followed by the following gentlemen, who subscribed the amounts set opposite their names:

Theo. Wetterstroem.....\$5	Otto Rauchfuss.....\$5
Andrew E. Diebold.....5	Al. Meininger.....5
A. Bingel.....5	W. L. Reum.....5
Otto Lippert.....5	Chas. Freericks.....5
Alfred De Lang.....10	A. Wetterstroem.....5
Frank H. Freericks.....10	J. A. Fieber.....5
Robert Groenland.....10	August Meier.....5
C. A. Durrell.....5	C. B. Hans.....5
Wm. Kiehl.....5	F. L. Grothe.....5
E. Friehmelt.....5	E. F. Hollenbeck.....5
H. T. Vilter.....5	Wm. T. Schell.....5
D. E. Murphy.....5	John Keeshan.....10
Wm. Knemeceller.....5	Otto Kistner.....5
Jos. Blasser.....5	G. Danziger.....5
George W. Kylius.....5	Julius Greyer.....5

Mr. Alfred Vogeler was elected treasurer, and the president appointed Messrs. Vogeler and Wetterstroem to solicit additional subscriptions. It was also decided to draft a petition, to be signed by all druggists in the city, urging the Legislature to pass the amendments with all due speed. The matter of permanently organizing the association was intrusted to the committee having the present duty in hand, after which the meeting adjourned subject to the call of the chairman. In addition to the above subscriptions many others have since added their shares to the fund, and a good-sized bank roll will be in the hands of a party of druggists who will journey to the capital of the State in the near future. The money is to be used in defraying the expenses of the delegation while at Columbus.

The case of Druggist Albert Wetterstroem who was charged with selling dilute phosphoric acid, which was 79 per cent. too strong, was decided in favor of the defendant by a jury in Squire Winkler's Court.

The druggist felt highly elated over the outcome of this case, as it is the third victory in so many weeks. There is talk that some of the other cases will be nollied, as it feared that a conviction cannot be had on the evidence gathered by the Food and Dairy Commissioner. The outcome of these cases and the work of the druggists at Columbus will be watched with much interest.

#### Bought "Knockout Drops."

BOSTON NEWSPAPER MAN BUYS AT DRUG STORES WITHOUT PRESCRIPTIONS OR WITHOUT BEING OBLIGED TO REGISTER.

BOSTON, March 4.—It was stated in a Boston paper to-day that a member of its staff bought at nine different drug stores in this city, without being required to register his name and place of residence, chloral hydrate, known to the police as "knockout drops." One of these places, it is asserted, is managed by a member of the State Board of Pharmacy. This is regarded as significant, and shows evidence of the laxity of regard for the statutory laws.

The man claims to have called at 12 stores, but at three he was unable to buy. In only one case where a purchase was made was the poison label attached to

the bottle, and in no case was a physician's prescription shown, or even asked.

Section 6 of the Public Statutes reads as follows:

Whoever sells chloral hydrate without the written prescription of a physician, shall keep a record of such sale, the name and amount of such sale, and the name and residence of the person or persons to whom it was delivered; and it shall at all times be open to the inspection by the officers of the district police and by the police authorities and officers of cities and towns. Whoever neglects . . . to comply with the law shall be punished by a fine not exceeding \$50. Whoever sells any of the poisonous articles mentioned in this section without the prescription of a physician, shall affix to the bottle, box, or wrapper a label bearing the word, "poison," also the name of the vendor. Every neglect to affix the label as aforesaid shall be punished by a fine not exceeding \$50.

Mr. Whitney of the Board of Pharmacy, says the board has no power to revoke the certificate of any pharmacist, no matter to what extent he may violate the law. That is the power the board is trying to obtain from the Legislature. The sale of so dangerous a drug as chloral hydrate without proper restrictions is, of course, a menace to the community. The board practically has no power to interfere and enforce the law.

Mr. Tilden of the board, says "there is no law concerning the sale of "knockout drops."

When the superintendent of the board of police was asked about the matter he said he would bring the druggists who violated the law into court. The paper published the names and also the particulars of the sales. In all 940 grains were bought. The fact that one of the druggists, of whom the drops were bought, is a member of the State Board of Pharmacy, has occasioned a great deal of talk and unpleasant criticism.

#### Revising the Pharmacy Law in Ohio.

COLUMBUS, March 3.—The Blackburn bill revising the existing pharmacy law has been receiving some attention of late, and meets so far the very general support of the pharmacists of the State. The Ohio board proposes to vigorously support the measure, and with a view to enlisting the aid of the pharmacists throughout the State has sent out a circular-letter to the druggists of Ohio, which reads as follows:

#### BOARD OF PHARMACY SUPPORTS THE BILL.

OFFICE OF THE SECRETARY,  
OHIO BOARD OF PHARMACY,

#### OHIO BOARD OF PHARMACY.

A. Meininger, . . . Cincinnati.  
Chas. E. Ink, . . . Columbiana.  
Chas. Krone, . . . Hamilton.  
George W. Voss, . . . Cleveland.  
W. R. Ogier, Sec'y, . . . Columbus.

COLUMBUS, OHIO, March 1, 1896.

DEAR SIR:—The Ohio Board of Pharmacy is heartily in favor of the bill recently introduced in the House of Representatives of the Ohio Legislature by Mr. Blackburn, and known as H. B. No. 456. The purpose of this bill is to define more explicitly who may and who may not lawfully conduct drug stores or pharmacies in this State, and to provide penalties for violations of the law where none now are pronounced, or when specified are so indefinite as to render the matter of assessing them one of great difficulty and uncertainty.

It also requires that all fines assessed and collected for violations of the law, together with all the receipts of the Board of Pharmacy, shall be paid into the State Treasury to the credit of said board, and the expenses of conducting the affairs of the board and of prosecuting offenders against the law shall be paid from the same source upon warrants properly authenticated. The present law commands the Board of Pharmacy to prosecute all violations of the law and yet does not permit any of the fines to come into the possession of the board, so that the more suits for the enforcement of the law we have



the more money we lose. The board cannot longer continue prosecutions under such a system, and the result is apparent that without some change the present law will be wholly inoperative and valueless.

The Blackburn bill also provides that the renewals of registrations shall be made every two years instead of three years as at present. This increases the cost of keeping up the registration of each registered person but 16½ cents per year, while it enables the Board of Pharmacy to keep better track of all those who are entitled to renewal of registration, and also secures a slight increase in the total receipts, thereby rendering the work of the board more efficient. The bill also makes provision for the supervision by the Board of Pharmacy of the traffic in drugs, poisons and pharmaceutical preparations in villages remote from drug stores. Great abuses have arisen under the present law in many localities throughout the entire State where there are no registered pharmacists, and many wholly incompetent and ignorant persons are dealing in the most dangerous drugs without any one to molest or dispute such traffic. The Board of Pharmacy should have some oversight of such business.

May we not count on you using all your influence with the members of the General Assembly to support this measure. The present Legislature is not unfriendly to this bill, but a word from the druggists of the State will greatly help in rendering the enactment of the bill into a law.

Very truly yours,

(Signed) W. R. OGIER,  
Secretary, Ohio Board of Pharmacy.

A Cincinnati newspaper has recently been publishing attacks on the board, charging it with extortion and intimating that the moneys collected had not been accounted for.

In point of fact the fees received have never been sufficient to enable the board to carry on its business in a manner to make it of the greatest value. W. R. Ogier, secretary of the board, expressed his own views on the existing and on the proposed laws as follows: "The Ohio Pharmacy law was enacted in 1884, and at that time pharmacy legislation was in its infancy, and the law then passed was a very crude, ambiguous and unsatisfactory affair. It has come to pass that if a better statute cannot be secured in this State it would be just as well not to have any at all. The Blackburn bill makes about the best out of the law as it now stands that can be done with it. We ought to have an entire new law, but if this bill is passed we will be in much better condition than heretofore and a better one may be secured in the near future."

### A New Pharmacy Law for Rhode Island.

The revision fever has struck Rhode Island also, and a new pharmacy bill has been presented in the Legislature and public hearings have been had upon the bill.

The second hearing was had on March 3, Norman N. Mason and Secretary Cates of the State Board of Pharmacy being present.

Chairman Freeman opened the hearing by outlining the objections which had been presented at the previous hearing. In the first section the objection was not so much against the establishment of a new board as in regard to discharging the present board at once. The general objection to the third section was the limitation of the board to "registered" pharmacists—i.e., the proprietors of drug stores. There was also an objection to the use of the word "proprietor" in the sixth and seventh sections.

Mr. Mason stated, on behalf of the framers of the proposed bill, that it had been drawn up for the benefit of the public, not for the benefit of the pharmacists. It was not intended to make the business of the pharmacist more easy, but to put every restriction upon a danger-

ous business. It is important that the responsible person should be the proprietor of the store. Mr. Mason stated that he had been a member of the board since 1870, and the greatest trouble that they had to contend with was to restrain persons from working their way into the business under false pretenses, and the establishment of "scaly" stores by such persons.

### VIEWS OF THE PHARMACEUTICAL ASSOCIATION.

Druggist James O'Hare, representing the Rhode Island Pharmaceutical Association, in reference to the third section of the proposed bill, said that there was no objection to the presence of physicians on the board, provided they were regularly qualified as registered pharmacists. There are a number of instances in the State where the proprietor of a drug store is a practicing physician, and under such circumstances the physician is eligible to the board. If, however, they are not in daily contact with the business of the druggist they are not desirable members of the board. The bill requires that each member of the board shall be a registered pharmacist, and thus bars out the registered assistant pharmacist. It is desirable to have the board so constituted because the owner of a store is liable to take greater interest in the subject.

Mr. O'Hare gave the history of this movement among the druggists, and stated that the bill, as formulated, was the result of a conference of committees from the Rhode Island Pharmaceutical Association and the Mortar and Pestle clubs. The former association was founded in 1874, and the latter includes all the druggists of the State outside of Providence, and three-quarters of the druggists in the city. The proposed bill, Mr. O'Hare said, represented the desires of practically all the druggists of the State.

### OBJECTIONS TO THE BILL.

Lawyer Cushing, for the remonstrants, stated that his main objection on the point at issue was that it was the apparent purpose of the framers of the bill to make the board a close corporation by making eligible only those wealthy enough to own stores. There was merely a property qualification between the registered pharmacist and the registered assistant pharmacist.

Mr. Mason said that there was a question of permanence to be taken into consideration. The registered assistant pharmacist is likely to be constantly changing his location and make it difficult to place the responsibility. The board was told some time ago that this question of permanence was of great importance. The officers of the law should know who is the responsible party.

C. H. Daggett also spoke against this provision. He thought that the registered assistant pharmacists should be eligible to the board. The proprietor—that is, the registered pharmacist—seldom sees a prescription which goes out of his store, while the man who puts them up is in daily contact with the business in detail.

Mr. Cushing said that the question of permanency was not of much importance when a man actually suffered at the hands of a dispenser, through ignorance, carelessness or real criminal intent. The sufferer cannot recover from the proprietor in such a case unless the proprietor is cognizant of the act. Mr. Cushing also desired that the words "in their discre-

tion" be stricken from the seventh section. He considered that they were too latitudinous. No registered pharmacist or registered assistant should be deprived of his rights unless good and sufficient cause was shown in a fair hearing.

It was suggested that in the section prescribing the duties of the pharmacist there be added a clause to prevent the erasure of records from the prescription books.

After a general discussion the committee took the matter under advisement, and the hearing was adjourned.

### Conference of the State Boards of Pharmacy.

A conference was held at Syracuse on March 4 of representatives of all the boards of pharmacy in this State. At the conference a great amount of ground was covered, and a report adopted for submission to the New York State Pharmaceutical Association at the meeting that will be held in June. Briefly, the conference favored the idea of one pharmacy board and one pharmacy law for the entire State if projected on lines that would insure greater effectiveness in the enforcement of the law than under the present methods. Annual renewal of licenses was favored, and so also were uniform fees for examinations.

### NO REGISTRATION ON DIPLOMAS.

The idea of registering licensees by examination of any of the four boards of the State, upon the payment of a nominal fee, received favorable consideration. It was the sense of the conference that graduates in pharmacy should pass an examination before receiving licenses to practice as pharmacists and the adoption of a uniform standard for examinations was favored.

The proposed pharmacy law as favored by the German Apothecaries' Society of New York was passed upon, and so also were the features in the amendment to the present pharmacy law as submitted by Clay W. Holmes at the Saratoga meeting of the New York State Pharmaceutical Association.

### MEMBERS PARTICIPATING IN THE CONFERENCE.

That mutual benefits should accrue to the four boards from this conference seemed to be the sense of all present. Dr. Balser represented the New York City board; D. L. Cameron and L. T. Perkins, the Kings County board; Dr. W. G. Gregory and C. O. Rano, the Erie County board, and Dr. A. B. Husted, C. H. Haskin, F. L. Norton, J. Clitherow Smith and E. S. Dawson, Jr., of the State board. Dr. Balser was elected chairman and Mr. Dawson secretary of the conference, and each board was allowed one vote. The hope was expressed that the four entire boards could attend the meeting of the New York State Pharmaceutical Association, at Buffalo, and hold another conference there.

### The Sale of Alcohol at Wholesale in Louisiana.

A law has been enacted in the State of Louisiana which authorizes wholesale druggists to sell alcohol to retail druggists and physicians in quantities of not less than one gallon, without license fee.

### Co-operative Manufacturing in New England.

BOSTON, March 4.—In a printed circular to the druggists of New England, the New England Druggists' Union asks every local organization to stand firm for itself and for the union. It also calls upon members to exert themselves to increase the power and influence of their local societies. A special feature of the work of the union is to obtain the support of the jobber and manufacturer in an effort to do away with the dishonorable practice of cutting prices. The union believes that this kind of competition is demoralizing to the best interests of pharmacy, and that the jobber or manufacturer who countenances the practice is not loyal to the retail pharmacist.

The New England Druggists' Union is unequalled in size and strength by any other organization, and a great deal of good has been accomplished. The president, F. M. Harris, says: "Let us all stand firm for our common interests and success is assured."

#### LOOKING TOWARD CO-OPERATIVE MANUFACTURE.

Among the many questions that have been discussed and are under discussion and consideration by the New England Druggists' Union is a proposition to form a Co-operative Association for the manufacture of drugs and medicines. The question has been only informally talked over, but the novelty of the scheme has given it precedence over other matters at times. A suggestion has been made that if such a concern could be founded, there would not be so many varieties of medicines in the market, yet every need could be supplied. A great many of the "names" of medicine could be done away with and only standard medicines produced. The druggists would by this plan be more unanimous in their work, and the result obtained would be gratifying.

#### Opposing Changes in Iowa.

President W. H. Torbert, of the Iowa State Pharmaceutical Association, has issued a circular letter to the pharmacists of the State, warning them to use their best efforts to defeat two bills now pending in the Senate, one introduced by Druet and the other by Early. He outlines the objections to the bills as follows:

DUBUQUE, IOWA, February 12, 1896.

To Iowa Pharmacists:

I herewith submit you bills which have been introduced in the Iowa Legislature that are fraught with great danger to the pharmacists of Iowa. One makes all physicians registered pharmacists; another applies the mulct law to all druggists who sell liquor for a beverage. This latter bill, should it become a law, would simply be a pretext for holding up the druggists of Iowa for mulct or tax of \$500. The third bill makes it impossible for any druggist to sell beer for any purpose whatsoever. This last bill with reference to beer will doubtless become a law in spite of any opposition that might be made to it, as it has already been favorably reported by the Senate Committee, so address your opposition to the former bills—namely, the one with reference to physicians becoming pharmacists without examination. All physicians who can pass the examination are heartily welcome to the ranks of pharmacy, and no qualified physician would ask to be admitted to the ranks of pharmacy without the qualifications enabling him to pass an examination. Also oppose the other with reference to imposing the mulct tax. Interest your papers to treat the subject editorially in the interest of pharmacy and temperance, and send marked copies to Senators and Representatives. Please also write Senators and Representatives personally on the subject, to defeat these bills.

I send you copy of a Dubuque paper with editorial which I think presents a forcible article on the subject. Prompt work is necessary. Please acknowledge receipt, and assure me of your co-operation.

I am in receipt this morning of a letter from a member of the House of Representatives, who is a pharmacist, who says: "From what I can learn the mulct bill with provisions to apply it to pharmacists is likely to pass and become a law." You therefore should devote time and attention to this matter. Respectfully,

W. H. TORBERT,

Chairman of the Committee on Legislation of the Iowa State Pharmaceutical Association.

#### The Raines Bill Affects Druggists.

New York druggists, who have made a study of the provisions of the Raines bill, are as a unit in condemning it.

John W. Ferrier, manager of J. N. Hegeman's Theater Pharmacy, at Thirtieth street and Broadway, said: "Speaking for our own firm in this matter, the bill has no vital interests for us. We have no license at the present time and have not had for some time. At none of our four stores do we sell liquor. Speaking from observation I can say, and my assertion will be backed up by every druggist in this city, that the Raines bill, if it becomes a law, will only add one more to the network of useless laws with which the trade have been hedged in. No reputable druggist wants to become a liquor dealer, and it is doubtful if, even if all restraint were removed and they were allowed to sell liquors freely, they would go into the trade to any extent. There are times, however, when it is extremely desirable for a druggist to sell either brandy or whisky. Many people who are obliged to take either of these liquors medicinally would not be willing to buy them at either a liquor store or a grocery store. They naturally wish to buy from the druggist. Under the new bill this will not be possible for many reasons. It is very doubtful if any druggist will be willing to pay the amount required—\$100—for his license, for it would mean that he would have to sell all liquors at a loss. Then, too, physicians of any standing would not give prescriptions calling for whisky or brandy. The entire bill is built on false principles, and ought not to become a law."

James S. Boyd, a well known member of the New York Pharmaceutical Association was in New York last week, giving his attention to means for the amendment of that paragraph in the Raines bill relating to restrictions on the sale of liquor by druggists. He called on President Geo. J. Seabury, but the latter was unable to give Mr. Boyd much satisfaction, since he was ignorant of those passages of the bill bearing on the retail drug trade.

#### After the Bogus Testimonials.

BOSTON, March 5.—Somebody is after the alleged bogus testimonial and has petitioned the Massachusetts Legislature for an act making it a misdemeanor for any person to cause to be circulated a testimonial, unless such testimonial be sworn to before a justice of the peace. The following bill has been presented to the House:

SECTION 1. No person or corporation shall circulate any testimonial intended to promote the sale of any patent or proprietary medicine, soap, or cure, unless such testimonial is sworn to before a justice of the peace of this Commonwealth. If such testimonial is circulated by written or printed copies, each copy shall include a copy of the jurat affixed to the original, and shall give the signature of the justice of the peace. Any person or corporation violating the

provisions of this section shall be fined one hundred dollars for each offense.

SECT. 2. The word "testimonial," as used herein, shall include all indorsements, recommendations, or evidence of any nature intended to aid, increase, or further the sale of the articles mentioned in the preceding section. The word "circulate" shall include the act of giving or sending or exhibiting to any person such testimonial, or posting the same publicly, or causing it to be printed in any publication or affixing it to any article sold or offered for sale.

Some of the jobbers look upon the plan as ridiculous and say it will not become a law. In the first place it is entirely impracticable. No legitimate firm or company engaged in the drug business or in the manufacture of medicines, cures, etc., would spend money publishing bogus testimonials. Advertising space is a costly thing, they say, and it does not pay to "fake." If a person is interested enough to try a patent medicine, cure, soap, etc., he has the privilege of writing the manufacturers regarding any testimonial, and he will also get an answer.

One of the leading jobbers said this morning that nothing could be gained by such a law. If it was proposed to get at the persons who wrote or gave a testimonial "for a consideration," even that plan would not avail because it would require a court to prove the unguineness of the testimonial, and few persons would care to undertake so expensive a method as a trial of that sort.

#### The Massachusetts Bill in Committee.

BOSTON, March 4.—That a number of druggists are bitter against the State Board of Pharmacy was indicated at the hearing held in the State House last Friday. The counsel on both sides made their closing arguments on the bills and petitions for changes in the existing laws, and there was a large attendance. The counsel for the remonstrants believed the present power of the board far exceeded the power of any other existing tribunal, in that it allows the board to sift a man's business, receive complaints against him, sit upon his case in Boston, possibly 150 miles from the seat of the difficulty, and revoke his license without a hearing or giving the defendant a chance to ascertain the charges against him. He understood the bill proposed to give the majority of the board the same power to do that which required the whole board now.

In concluding his remarks, Mr. Ely, for the remonstrants, desired it distinctly understood that they were not in any way appearing in support of an illicit liquor business.

A. H. Dubuque of Fall River was anxious to know what the board proposed to do with the fees of re-registration, which were to be placed at its disposal. In regard to the bill, he said, if it is intended to elevate the druggists, he objected most emphatically. Druggists objected to being elevated at the "end of a rope."

Mr. Butler claimed that unusual power was given by the proposed bill—the power to search premises without a warrant. It was, to him, almost incredible that such power should be given such a body. He read abstracts from the annual report of the board and submitted the document in evidence against granting additional powers to the board.

In closing for the petitioners, Mr. Pillsbury said the Senate bill contained these new provisions—re-registration, gross negligence, publication of address, surrender of revoked certificates under pen-

alty, unconditional payment of fees, method of appropriation, and power of revocation without former conviction in the criminal courts. He believed the bill was in the interests of justice and betterment of the profession.

### Connecticut Druggists Organize.

NEW HAVEN, March 4.—The druggists of Norwalk and South Norwalk have organized for the purpose of keeping the prices on patent medicines up to a proper standard. They have named their compact the Druggists' Protective Association. Of late considerable cutting of prices between the apothecaries has been going on, much to the chagrin of each one, and this movement is expected to stop the ruinous strife. George C. Stillson has been elected president; W. A. Vogel, vice-president; Edward F. Weed, secretary and treasurer.

The new scale of prices has already gone into effect.

### Death of James Whitall.

James Whitall, senior member of the firm of Whitall, Tatum & Co., died at his residence on East Penn street, Germantown, on February 28. He was in his sixty-second year and had been ill for several months. Mr. Whitall had been the head of the firm since the death of his father, who was its founder. He was born in Philadelphia and finished his education at the Haverford College. When he graduated he entered the business which his father had built up, and his close attention to his duties soon won him the respect of all the members of the firm. He was a hard worker, and was not only successful but progressive as well. He was a member of the Society of Friends, and it is claimed he never missed a meeting while in good health. He was consistent and conscientious in all his dealings.

Mr. Whitall's death was a surprise to his many friends. It was known that he was very ill, but it was thought that with the advent of spring he would regain his health. Early in the Summer, last year, he was ordered to Newport, where he had a cottage, and told by his physicians to take a long rest, as all that ailed him was that he was overworked. Mr. Whitall remained at his summer residence for some time, and when he returned to the city he was better, but not a well man. The doctor said more rest, and early in the fall he caught pneumonia from which he recovered. A few years ago he had the grip, and it is believed he never recovered from its effects. Since Christmas, it is said, he had not left his room, and during the past fortnight had been growing steadily weaker. The firm of which he was the head is one of the largest glass bottle manufacturing houses in the United States, and also carries druggists' sundries. Mr. Whitall, the founder of the house, was at one time a sea captain, then he entered the dry goods business, and later the one which bears his name.

### Manitoba Association.

The annual meeting of the Manitoba Pharmaceutical Association was held February 20 at Winnipeg, when there was a good attendance of members. The following were elected members of the council for the next two years: W. R. Bartlett, E. Flexon, J. C. Gordon, J. F.

Howard, E. D. Martin, A. E. Kelly and W. Pulford.

### A. P. A. Committees.

PRESIDENT GOOD NAMES THE DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION—THE COMMITTEE ON THE METRIC SYSTEM.

Prof. James M. Good, president of the American Pharmaceutical Association, has appointed the following delegation of 25 to represent the association at the meeting of the American Medical Association, to be held at Atlanta, Ga., on May 5 to 8 next, the sections on materia medica, pharmacy and therapeutics. The delegates appointed are:

Dr. H. H. Rusby, New York, chairman; Dr. Robert G. Eccles, Brooklyn; Dr. Charles O. Curtman, St. Louis; Prof. C. Lewis Diehl, Louisville, Ky.; Prof. Edward Kremers, Madison, Wis.; Dr. Charles Rice, New York; Prof. E. L. Patch, Boston; Henry P. Hynson, Baltimore; Prof. Oscar Oldberg, Chicago; Prof. C. S. N. Hallberg, Chicago; Prof. A. B. Prescott, Ann Arbor, Mich.; Prof. Joseph P. Remington, Philadelphia; Dr. H. M. Whelpley, St. Louis; Prof. Chas. Caspar, Jr., Baltimore; Prof. James H. Beal, Scio, Ohio; Prof. Charles M. Ford, Denver; John Ingalls, Macon, Ga.; S. P. Watson, Atlanta, Ga.; Wm. Simpson, Raleigh, N. C.; Wm. M. Searby, San Francisco; Dr. H. K. Slack, La Grange, Ga.; Prof. Virgil Coblentz, New York; George W. Sloan, Indianapolis; W. L. Dewoody, Pine Bluff, Ark.; and Howard P. Reynolds, Plainfield, N. Y.

In accordance with a resolution adopted at the Denver meeting of the association, President Good has appointed the following committee, composed of one member from each State and Territory and the District of Columbia, to memorialize Congress on the subject of establishing a uniform system of weights and measures, and, if possible, to secure the adoption of the metric system. The Denver resolution was embodied in a paper presented by Hon. R. A. Sauerhering of Wisconsin, and at present a member of Congress from that State. The committee as appointed by Prof. Good is as follows:

Prof. F. G. Ryan of Philadelphia, chairman; Charles C. Mohr, Alabama; Joseph Fouque, Arizona; J. F. Dowdy, Arkansas; D. D. Hunt, California; J. Kochan, Colorado; F. Wilcox, Connecticut; Linton Smith, Delaware; W. S. Thompson, Washington, D. C.; Wm. Aird, Florida; H. H. Arrington, Georgia; David E. Smithson, Idaho; C. S. N. Hallberg, Illinois; F. H. Carter, Indiana; C. G. Moore, Indian Territory; G. H. Schafer, Iowa; Mrs. M. O. Miner, Kansas; J. W. Gayle, Kentucky; J. A. Legendre, Louisiana; H. H. Hay, Maine; D. M. R. Culbreth, Maryland; Wilbur L. Scoville, Massachusetts; Arthur Bassett, Michigan; E. Floyd Allen, Minnesota; Joseph W. Eckford, Mississippi; C. C. Hamilton, Missouri; Norman A. Kuhn, Nebraska; W. A. Brown, Nevada; F. L. Way, New Hampshire; W. C. Alpers, New Jersey; James A. Kinnear, New Mexico; C. A. Mayo, New York; G. W. Smith, North Carolina; H. L. Haussamen, North Dakota; L. C. Hopp, Ohio; John E. Sombart, Oklahoma; H. D. Dietrich, Oregon; Wm. E. Cates, Rhode Island; E. S. Burnham, South Carolina; Charles F. Ayer, South Dakota; R. W. Vickers, Tennessee; Thomas W. Powell, Texas; F. A. Druehl, Utah; G. A. Crossman, Vermont; T. Roberts Baker, Virginia; Henry E. Holmes, Washington State; E. L. Boggs, West Virginia; E. B. Helmstreet, Wisconsin, and Edward Desmond, Wyoming.

### For a Meeting in Nashville.

A. B. Merriam, the secretary of the National Wholesale Druggists' Association, has written to the Commissioner General of the Centennial Exposition to be held at Nashville in 1897, acknowledging receipt of invitation for the association to hold their convention in Nashville in 1897 as follows:

I shall do everything I can to direct the convention of 1897 to Nashville. Personally, I would like to visit your beautiful city, and, more than that I believe it would strengthen our member-

ship in the South, and gratify our present members, who have stood by our organization. The whole matter will be settled by the Committee on Time and Place of next meeting, which our president, Mr. Eliel of Minneapolis, will appoint when we meet there in October next, the 5th to the 10th. The committee is an important factor in the case, and I shall not be indifferent to the members composing it. Hoping to meet you personally next year, etc.

### Papers on Education and Legislation.

From Jas. H. Beal, secretary of the Section on Education and Legislation of the American Pharmaceutical Association for the forty-fourth annual meeting, to be held in Montreal August 12, 1896, we have received the appended list of suggested subjects for papers. Members are not limited to the topics covered by the queries here enumerated, and papers upon any subject pertaining to pharmaceutical education and legislation are solicited. To insure printed copies and proper presentation at the meeting, all papers should be in the hands of the committee not later than June 1, 1896. The suggestions for papers follow:

1. What has been the effect of pharmacy legislation upon the practice of pharmacy in the United States?
2. What is the best form of law for regulating the labeling and sale of poisons?
3. Should a pharmacy law provide for one or for two grades of licentiate?
4. What is the best method of bringing about greater uniformity in pharmacy legislation in the different States?
5. Is the sale of intoxicating liquor in a drug store strictly for medicinal purposes a necessity or would it be wise to prohibit the sale excepting in compounds absolutely?
6. What is the best method of conducting examinations under existing laws, and in view of the circumstances under which the boards are required to work?
7. To what extent, under existing circumstances, can the work of examining boards be made more practical?
8. To what extent should a candidate for registration in pharmacy be required to be familiar with the working formulas of official preparations?
9. To what extent should a candidate for registration in pharmacy be required to be familiar with the subjects of microscopy and volumetric analysis?
10. To what extent should the physiological properties and therapeutic action of drugs be taught as a part of a course in pharmaceutical materia medica?
11. What is the place of the "Quiz" in a course in pharmacy?

Papers upon these or any other topics appropriate to the section may be sent to any member of the committee. Following are the names of the committee, with addresses: Carl S. N. Hallberg, chairman, 358 Dearborn street, Chicago, Ill.; H. M. Whitney, Boston, Mass.; H. M. Whelpley, 2342 Albion place, St. Louis, Mo.; Louis Emanuel, Grant and Second avenue, Pittsburgh, Pa.; Jas. H. Beal, secretary, Scio, Ohio.

### "In Colorado."

This is the title of a poem by Cora Linn Daniels, which we have received from the publishers, the Pabst Brewing Company of Milwaukee. Mrs. Daniels will be remembered by many of the members of the N. W. D. A. who participated in the excursions attending the Denver meeting of the N. W. D. A. as a charming conversationalist and a lady who made herself extremely popular with everybody in attendance. The poem is dedicated to the two associations of wholesale druggists and proprietors, and is a fine attempt to describe in verse some of the grand scenery of the Rockies. The work is printed and bound in excellent taste and is a fine example of the newest art of the printer.

## NEW YORK AND VICINITY.

Summit, N. J., is to have a new pharmacy by W. H. Rogers.

Leo Weinstein has sold his pharmacy at 152 Fulton avenue, Astoria, L. I., to a Dr. Platt.

Samuel B. Williard, the druggist of Yardley, N. J., has opened a new pharmacy on Main street.

H. W. Bronson, the Northport, L. I., pharmacist, is moving into new premises recently erected for him.

A new pharmacy has been opened at 756 Fulton street, Brooklyn, by J. Francis Smith & Bro.

U. Friedman, formerly apothecary to the Mt. Sinai Hospital, has purchased the pharmacy of P. G. Smith, Jarolemon street, Brooklyn.

The pharmacy at 764 De Kalb avenue, Brooklyn, is now owned by L. M. Rossof, who purchased it from the former proprietor, I. Schnilkind.

John M. Fisher & Sons have given up their pharmacy at 92 Amsterdam avenue, this city, and will open a new store at 455 Broadway, Brooklyn.

Preparations are about completed for the opening of a new pharmacy at Newton, N. J., by H. O. Ryerson. One of the features will be a Low's Art Tile Fountain.

Joseph Saile has left P. V. R. Post's Passaic Pharmacy to take up the study of veterinary surgery, and is now a student at the New York Veterinary College.

J. J. Alexander, who owns the handsome pharmacy on Park avenue at the corner of 120th street, contemplates opening a branch establishment a little further uptown.

Reeder Bros., of Fourth avenue and Thirty-first street, have engaged a new clerk with a singularly appropriate name for a druggist. His name is C. A. Powders, and he succeeds Thomas Smiley.

It is rumored that Prof. Heebner, formerly assistant to Prof. Bedford in the N. Y. College of Pharmacy, and lately of Toronto, has resigned his professorship of pharmacy in the Toronto University.

The Hudnut Pharmacy, lately established on upper Broadway at 1201, has failed to pay, and the premises have been vacated. The stock has been removed to the main store, 205 Broadway.

Geo. O. Ferguson, treasurer of the Grosvenor & Richard Co., Boston, sailed for Gibraltar last Saturday on the North German Lloyd Steamship "Werra." He expects to be gone about six weeks, and will visit Paris on his way back.

Geo. Watson, the Newark, N. J., clothing merchant, who committed suicide at the Gilsey House last week, had a wide acquaintance among druggists, and much sorrow has been expressed at his untimely end.

G. W. Caldwell, druggist, of Lynbrook, L. I., and his family had a narrow escape from asphyxiation recently. A defective flue caused the gas from the stove to circulate through the room. Mr. Caldwell was not overcome, but it was several hours before his wife revived.

Abe Doremus, a clerk in Hegeman's Theater Pharmacy, at Thirtieth street and Broadway, got caught between an uptown and downtown cable car a few days ago, and sustained internal injuries, which are, however, not of a serious character.

The death is announced of R. G. Van Pelt, a much respected and widely known druggist of New Brunswick, N. J. He was a son-in-law of Richard McDonald, whom he succeeded, and was reputed to have the largest retail business in the State of New Jersey.

The old-established pharmacy of Howard P. Reynolds, Park and North avenues, Plainfield, N. J., has been sold to T. E. Armstrong, who has been manager for Mr. Reynolds for a period of 15 years. Mr. Reynolds has been very successful as a druggist and his retirement is caused by failing health.

E. R. Squibb & Son, the well-known manufacturing pharmacists of Brooklyn, are erecting new laboratories on Vine street, 100 feet north of McKinney street, to cost \$8,000. F. Holinberg, 911 Broadway, is the architect, and L. Nehrman, 256 Cleveland street, is the builder. The building is to be a one-story structure 83 x 95 feet.

W. A. Richardson, widely known at one time among the traveling fraternity of this country as the former representative of the Maltine Manufacturing Company, and later of the London branch of Frederick Stearns & Co., Detroit, has returned to the United States, and the London business of the firm heretofore under his charge has been committed to the care of Thos. Christy & Co., the well-known drug dealers.

Quite a number of New York drug clerks make a practice of wintering in the city and passing the summer at some agreeable seaside resort. They are enabled to do this by changing their positions as the summer approaches. Not all are able to accomplish the change in so agreeable a manner as E. Ancelin, the former apothecary of the Northwestern Dispensary in this city, who is now making preparations to open up the pharmacy of the Long Beach Hotel, Long Beach, L. I., which he will take possession of as proprietor.

A long article in a recent issue of the New York World contains the report of an interview with Alfred H. Mason on the Roentgen rays. At the last meeting of the Society of Chemical Industry, Wm. D. Crumble, an assistant in the United States Laboratories in this city, showed some Roentgen pictures which were made without the use of Crookes's tubes, and therefore without the cathode rays. Mr. Mason said that Mr. Crumble's discovery was really made in an entirely different field from that of Professor Roentgen's investigation. He predicted that it opened the way to results even more remarkable.

### VISITING THE CITY.

Visitors to the New York drug market have been fewer the past two weeks than during any previous period. Among the better known representatives of the travelling fraternity we notice Alexander Lewis of the Chicago branch of Johnson & Johnson, who is known over a wide section of the country as "Belladonna Lewis." R. B. Reed, who represents the

Low Art Tile Company, reported at the New York office last week, looking hale and hearty. His views of the future trend of business are silver lined and roseate. Joe Jacobs, the distinguished Atlanta pharmacist, whose fame as a gastronome, litterateur and chemist is only bounded by the seas, was among the out-of-town visitors to New York last week. Other visitors noticed in the market were C. V. S. Rea, of Hacketts-town, N. J.; Wiley Baker, Trenton, N. J.; H. R. Thorn, Fayetteville, N. C.

### FAILURE OF THEODORE RICKSECKER.

Theodore Ricksecker, manufacturer of perfumeries and wholesale dealer in toilet articles, at 58 Maiden lane, made an assignment on March 7 to Herbert Parsons, with preferences for \$23,000 to the following creditors:

Adelaide Harger, Oberlin, Ohio, \$5,438; J. Max Hark, \$80; T. H. Landon, \$107; Parsons, Shepard & Ogden, amount not mentioned; Broadway Bank of Brooklyn, N. Y., \$800; Mary E. Wilde, \$1,327; Martin H. Wilckens, \$300; H. B. Halgh, \$500; Hagerty Bros. & Co., \$350; Julius Ricksecker, \$1,200; George Luders, \$500; E. Fougere & Co., \$400; National Park Bank, \$381; William M. Maxim, \$240; W. H. Schieffelin & Co., \$500; East Orange National Bank of East Orange, N. J., \$1,021; Patterson & Purdy, \$80; T. T. Grossmith, \$300; Columbia National Bank of Columbia, Penn., \$1,237; Prudence Stewart, \$1,034; estate of Charles H. Hobart, \$300; National Park Bank, \$2,000; Columbia National Bank, \$332; Catasaquas National Bank of Pennsylvania, \$750; Samuel Wilde's Sons, \$357; First National Bank of Bethlehem, Penn., \$367; Warrick Freres, \$241; C. W. Jencks & Bro., \$454; Newman & Schmidt, \$267; C. H. Graves & Son, \$223; F. O. Boyd, \$106; Parsons, Shepard & Ogden of 111 Broadway are the attorneys for the assignor.

### College Nominations.

The annual meeting of the College of Pharmacy of the City of New York, which takes place Tuesday March 17, promises to be one of unusual interest both to members and the faculty of the College. The nominating committee has agreed upon the following list of nominations to fill the several offices:

FOR PRESIDENT: Edward Kemp.

VICE-PRESIDENTS: Charles F. Chandler; John R. Caswell; Gustavus Ramserger.

TREASURER: Herbert D. Robbins.

SECRETARY: Alfred H. Mason; Assistant Secretary: O. J. Griffin.

FOR TRUSTEES to serve three years: Clarence O. Bigelow, Samuel W. Fairchild, George Massey, Ernst Molwitz, Reuben R. Smith.

FOR ASSISTANT SECRETARY: (unexpired term) O. J. Griffin.

FOR TRUSTEE: (term to end in 1898) Horatio N. Fraser.

FOR TRUSTEE: (term to end in 1897) Charles S. Erb.

The Board of Trustees met March 8 and discussed the proposed amendments to the by-laws of the College which were referred to in these columns in a previous issue. It is understood that the proposition to appoint a chairman of the Board of Trustees on whom it was intended most of the executive work would devolve, has not, it is understood, met with the approval of the Board, and the new by-laws will, in all probability, be adopted without this amendment.

Some changes are contemplated in the schedule of lectures and the work of the chemistry instructors will be divided up to accommodate the retirement of Professor Elliott, whose department will probably be directed by Professor Coblentz.



## Committees of the Drug Trade Section.

The list of committees announced by Chairman Hartford of the Drug Trade Section of the New York Board of Trade and Transportation, Thursday, February 20, has been held over from our previous issue on account of the pressure of other important news matters:

### EXECUTIVE COMMITTEE.

John McKesson of McKesson & Robbins, Christopher L. Williston of Chas. Pfizer & Co., Jesse L. Hopkins of J. L. Hopkins & Co., James Hartford of Schoellkopf, Hartford & MacLagan, Ltd., and Albert Bruen of Bruen, Ritchey & Co.

### COMMITTEE OF LEGISLATION.

Andrew B. Rogers of Rogers & Pyatt, William D. Faris of H. J. Baker & Brother, Thomas F. Main of Tarrant & Co., F. G. Meyer of Meyer Bros. Drug Company, and Jacob Kleinhaus of Chas. Cooper & Co.

### COMMITTEE ON MEMBERSHIP.

Jesse L. Hopkins of J. L. Hopkins & Co., Thos. P. Cook of the N. Y. Quinine & Chemical Works, Ltd., S. M. Money Penny of S. G. McCotter & Co., George Merck of Merck & Co., and E. W. Phair of E. W. Phair & Co.

### COMMITTEE ON ARBITRATION.

Frederick M. Robinson of R. W. Robinson & Sons, Albert Plant of Lehn & Fink, George Massey of Lanman & Kemp; J. Sherwood Coffin of Coffin, Redington & Co.

### COMMITTEE OF JOBBING DRUGGISTS.

John McKesson of McKesson & Robbins, chairman. The committee includes one representative from each jobbing drug house in the Drug Trade Section.

### COMMITTEE OF MANUFACTURING CHEMISTS.

Christopher L. Williston of Charles Pfizer & Co., Henry T. Jarrett of Mallinckrodt Chemical Works, Edward H. Hammer of Keasby & Mattison Company, Emil Levi of C. F. Boehringer & Soehne, Howard McK. Kirkland of New York Quinine & Chemical Works, Ltd.

### COMMITTEE OF MANUFACTURING PERFUMERS.

Theodore Ricksecker, Henry Dalley, Jr., of Lazell, Dalley & Co.; Bowles Colgate of Colgate & Co., Sturgis Coffin of Ladd & Coffin.

### COMMITTEE OF MANUFACTURING PHARMACISTS.

Alfred Hy. Mason of Seabury & Johnson, Samuel W. Fairchild of Fairchild Brothers & Foster, John Clay of Parke, Davis & Co., Samuel W. Bowne of Scott & Bowne, E. Stoffregen of Sharp & Dohme.

### COMMITTEE OF IMPORTERS OF DRUGS AND CHEMICALS.

John H. Stallman of Stallman & Fulton, William A. Hamann of the Roeseler & Hasselacher Chemical Company, Charles D. Thompson of Bowman, Thompson & Co., Ltd., George R. Hillier of R. Hillier's Son Company, John L. Riker, Jr., of J. L. & D. S. Riker, Joseph A. Velsor of Peek & Velsor, Theodore Welcker of Merck & Co.

### COMMITTEE OF IMPORTERS OF ESSENTIAL OILS.

Francis H. Sloan of Dodge & Olcott, Carl Brucker of Fritzsche Brothers, George Lueders of George Lueders & Co.

## Botanical Garden Plans.

A meeting of the Board of Managers of the New York Botanical Garden was held in Hamilton Hall, Columbia College, March 5. There were present Cornelius Vanderbilt, Samuel Sloan, Charles P. Daly, William E. Dodge, D. O. Mills, Charles F. Cox, J. J. Kane, J. A. Brown, James F. Kemp, and Secretary N. L. Britton. It was resolved that the number of patrons be limited to 100, each of whom should contribute \$5,000. The following have contributed \$5,000 each:

J. P. Morgan, Andrew Carnegie, C. Vanderbilt, J. D. Rockefeller, D. O. Mills, J. A. Brown, W. E. Dodge, J. O. Sergmer, W. C. Schermerhorn, C. P. Daly, Oswald Ottendorfer, Samuel Sloan, George J. Gould, Miss Helen M. Gould, J. S. Kennedy, William Rockefeller, J. M. Constable, Mrs. Esther Herrman and John R. Pitcher.

The contribution to entitle to a life membership was fixed at from \$1,000 up to \$5,000. Third class members, each candidate to be approved by the Board

of Managers, are admitted at \$10. All members are to have free tickets to lectures and exhibitions.

The Committee on Plans and Buildings submitted three sketches of plans for greenhouses to be erected in Bronx Park. There will be an acre of glass in the greenhouse, and the palm house will be 60 feet high. Plans and recommendations were presented for a museum, and final plans will be obtained from architects.

The board, acting on the report of the secretary, recommended the purchase for the garden museum of the herbarium of J. B. Ellis of Newfield, N. J., containing 75,000 specimens of fungi, supposed to be the most complete in the world.

The following resolution was adopted:

*Resolved*, That the Board of Managers of the New York Botanical Garden view with regret the introduction in the Legislature of the bill to remove from the charge of the Board of Park Commissioners the parks above Harlem River, and respectfully protest against its passage.

## NEW YORK STATE.

**BUFFALO, March 5.**—The stock of the Coulson Drug Company, at Seneca and Wells streets, was sold at auction on Friday, February 28, by Sheriff Lamy, to satisfy executions served several days previous. Theodore Wende, attorney for John L. Nice, the heaviest creditor, bought the stock at \$3,518.99. The executions served aggregated \$5,800, and nearly all of them were held by Mr. Nice. John M. Chipman also had a claim against the company.

### THE CUT-RATE WAR IN BUFFALO.

The cut-rate war started here in November last is still raging, although the druggists, having formed an early combine, have rather the best of the situation. Faxon, Williams & Faxon, leading grocers, are the principal opponents in the fight, having put in a line of druggists' supplies. However, they do not advertise prices. The dry goods houses of Adam & Meldrum, and J. N. Adam & Co., have been selling Cuticura soap since Thursday, February 27, at 10 cents per cake.

Menzo Davis has opened a new drug store at Palmyra.

T. F. Hennessey is now manager of Stone's Pharmacy at Oswego.

Jno. P. Biglow has succeeded Van Zant & Rector at Schenectady.

Wright & Co. are the successors to the business formerly carried on by Roy Webber at Schenectady.

C. E. Greenman has opened a new and attractively fitted up store at Albia, a suburb of Troy.

Druggist H. C. Giesler and wife of Fulton leave on the 17th for a six weeks' trip to Denver, Col.

F. E. Marvin, late of Seabury & Johnson and Norwich Pharmacy Company, now represent Colgate & Co.

The stock of the E. M. Parmalee Medical Company, at Dansville, N. Y., has been advertised in Buffalo papers by the receiver, J. W. Burgess.

P. M. Lockir will, in the near future, open a new drug store on Main street, at Central Park. He proposes having the finest store in that locality.

R. H. Maltbie, druggist, formerly at the corner of Connecticut and Seven-

teenth streets, moved his stock the first of last month to East Otto, a small town in Cattaraugus County.

W. S. O'Brian, the West Eagle street druggist, is about to put in new store fixtures, made by C. H. Bangs of Boston. Mr. C. M. Bearce, Mr. Bang's representative, is in the city perfecting the plans.

W. J. McCahill, representative of Charles Lippincott, soda fountain manufacturer of Philadelphia, is in the city doing an enormous business. He is supplying nearly all the new fountains purchased.

Fred. N. Burt, printer of druggists' labels, has issued a handsome new counting room calendar, which has for its illustration a finely executed engraving of R. Henneberg's "The Hunt After Fortune."

C. D. Gibson was most highly honored recently, having been commissioned Assistant Quartermaster General of the State of Vermont G. A. R., the honor conferred being one of the highest in the United States G. A. R. This will take up the larger portion of his time since his retirement from the drug business.

C. J. Rosengren has lately opened a handsome new drug store at 509 William street, corner of Elmelle. The fixtures, drugs and fancy goods are all new. The wall and ceiling decorations are fine, and harmonize perfectly with the ivory white and gilt with which the woodwork is finished. Sliding glass cases and a beautiful Lippincott 12-can onyx fountain are in keeping with the eminently modern appearance of the entire interior of this handsome store. The prescription department is directed by Charles St. John of the class of '94, Buffalo College of Pharmacy.

O. E. Gibson, Bennington, Vt., has taken up the reins of management, having purchased his father's store on Main street. The store has been refitted with new fixtures, an exceptional handsome prescription desk has been placed in the store, with large glass mirrors and beaded glass doors and windows; a new Tuft fountain and a maple floor complete the changes. The store now is one of the most handsome in Vermont, and will most surely flourish under the new proprietors who is a very popular young man in town.

## CONNECTICUT.

### THE ACONITE POISONING CASE.

**NEW HAVEN, March 5.**—The suit of Marx Faber of Titusville, Pa., who is administrator of his brother's estate, against A. F. Wood's Sons, the Church street druggists, for \$10,000 damages, on the ground that his brother was killed by a mistake of a drug clerk who gave him tincture of aconite for cholera mixture, was on the Superior Court calendar, at New Haven, recently, on a motion for default for failure to file an answer to the complaint. Judge Shumway passed an order that an answer should be filed within a week's time or the case defaulted to the plaintiff. Judge Blydenburgh, who is counsel for the druggists, has complied with the order of the court.

### WOOD BRICKS FOR FARMERS.

An amusing error was made by a leading druggist of Rockville recently. It happened in this way. This druggist a



short time ago took the agency for an asthma cure and then made a big display of the remedy in his window. While it was true that some of the packages in the window contained the remedy, in most of them were blocks of wood with the same wrapper as covered the regular packages. It seems that the remedy is a good one, and it was recommended on all sides. A Tolland farmer—of course a farmer—hearing of the famous remedy, came in and asked for a box. The following night he had a severe attack of the disease and went for his new remedy, but on removing the cover was astonished to find a block of wood. The following day he returned to the drug store for directions on how to apply the medicine. At the store it was suggested he saw the wood and take the sawdust with a little molasses.

#### Notes.

H. C. Boswell is altering and enlarging his store in Greenwich.

Hale's drug store, at Norwalk, now contains the Postal Telegraph Company's office.

Dr. H. L. Daggett, who was well known to the druggists of this section, died at his home at New Haven recently.

Walter H. Lewis, a well known drug clerk of Danbury, and Miss Ray Collins, also of the same city, were married in New York City recently.

Joseph V. Brennan, the well-known druggist of Bridgeport, has been appointed superintendent of poor, succeeding Mr. Bunnell, who resigned last week.

Druggist C. H. Coe of Derby has been quite sick for some time past, and his illness has occasioned much anxiety among his many friends, but they look for a speedy recovery.

In the window of the Stanard Pharmacy, at Danbury, is a diminutive Brooklyn Bridge made up of boxes of liniment. The display is an eye catcher, and has therefore much merit.

G. S. Spaulding, the well-known druggist on Church street, New Haven, has been appointed receiver of the H. W. Stow Lumber Company of New Haven, who recently applied for a receiver.

William Hills, proprietor of a leading barber shop at Hartford, entered Philo W. Newton's drug store on a recent Sunday and took a seat. A very few minutes afterwards he died of fatty degeneration of the heart.

An attempt to burglarize Schoonmaker's pharmacy, at Ansonia, was made recently, but the would-be burglars must have been frightened away, as they took nothing of value. One of the large windows in the rear of the store was smashed in.

F. M. Wilson & Co., druggists, of Willimantic, made an exhibit at the recent convention of the Connecticut Pharmaceutical Association, at Bridgeport. A few days following Representative Wilson, senior member of the concern, received notice that his firm was awarded a prize.

Newton C. Smith, bookkeeper for the Apothecaries' Hall Company of Waterbury was married recently to Miss Sophia Smith, at the home of the bride's parents, Dalton, Mass. Mr. Smith received a handsome solid quartered oak combination bookcase and writing desk from his fellow employees.

Druggist E. C. Bryant of Meriden has an illustrious son who is secretary of the Pittsfield, Mass., Y. M. C. A. At the twelfth annual conference of the New England general secretaries of the Y. M. C. associations, at Portland, Maine, recently, Mr. Bryant spoke on "Association Men as Business Hustlers."

The Imperial Pharmacy, 238 State street, Bridgeport, formerly managed by William H. Madison, has been purchased by K. J. Damtoft and Martin Meyer. Mr. Damtoft is well known in and around Bridgeport. Mr. Meyer, his partner, is a comparative stranger in Bridgeport. For a number of years he owned and managed a pharmacy in New York City.

Representative Wilson of Willimantic, who is in the drug business in that city, has his hands full attending to meetings, at which matters of a legislative nature are disposed of. While there is a good deal of honor attached to the office of representative of the people at Hartford, there is also a plenty of work attached to it, and of this Mr. Wilson has his share.

Howard North and Dr. L. B. La Bonto have been granted a druggist's license for their pharmacy at Stafford Springs. On their first application they were refused, as the people thought they came to the no license town of Stafford Springs to conduct a semi pharmacy and semi saloon establishment. Since the druggists have convinced the residents that they intended to run a legitimate drug business, the townspeople withdrew all opposition. The new firm is doing very well, and the members say the prospects are bright.

For some time past a box with \$25 inclosed has been on exhibition in the window of Downey's pharmacy, at New London. A notice stated that to every purchaser of a certain amount of goods a number would be given and that on a certain date, the numbers would be placed in the box, and one drawn out therefrom, and that the holder of this lucky number would be presented with \$25 in gold. The drawing took place as advertised, and No. 22,626 was drawn out, and it was held by J. C. Bridgeman, a bookkeeper.

The first floor of the building 157 Church street, New Haven, has been leased by the Arthur H. Barnes Company, the well-known Fair Haven druggists. The ground floor will be entirely remodelled and extensive improvements made. It is expected that the new drug store will be opened about May. Mr. Barnes will still continue his drug business in Fair Haven. Special efforts will be made to fit the place up in first class shape, and it will contain all the latest accessories. The new establishment will be known as the City Hall Pharmacy.

Roswell O. Beach, formerly bookkeeper at Williams & Carleton's drug store, Hartford, died recently at La Junta, Col., of consumption, at the early age of 34 years. Mr. Beach was in the employ of the above named concern for about ten years, and about a year ago was obliged to go West in search of a climate that would help his ailment. He visited several places, but in vain. Mr. Beach was accompanied by his wife. His remains were brought East and buried in Forestville, his native place. The deceased was much interested in politics, being an active and well read Republican.

## MASSACHUSETTS.

### WANTED TO PASS BY PROXY.

BOSTON, MASS., March 5.—An investigation is being made in the case of a man in Adams who undertook to become a pharmacist in 24 hours. He wrote a teacher of pharmacy who had a card in a Springfield paper that he would not care to take a full course in study, but if he (the instructor) would go to Boston in May and pass an examination in his name he would pay him \$100. The young man further stated that he knew of "four or five other fellows who had passed by proxy," and saw no reason why he could not do the same. The authorities are quietly investigating.

### "DEVILTRIES OF DRUGGISTS."

Henry H. Faxon of Quincy, one of the most prominent men in the temperance movement in this State, is in favor of the new pharmacy bill. He says he does not wish to be understood that he thinks every druggist is a scoundrel. He does not want to misjudge any druggist. The honest druggist is doing a great work for temperance, but he had at his home six scrap books filled with the devilties of druggists, and he had not got through with them. In Quincy, he says, there are five or six druggists not one of whom was fit to sell drugs. He had had experience in prosecuting druggists, and he had found it almost impossible to secure a conviction. They were "terrible liars" when they got into court, and it was the hardest kind of a job to get a case against them. If there was anything stronger than the present bill, said Mr. Faxon, and it would be well to have it on the statute books, he would be glad to assist in putting it there.

### ENTERTAINED BY THE BOSTON DRUGGISTS' UNION.

At the February dinner of the Boston Druggists' Association there was an unusually large attendance. Everett C. Marshall presided. Surgeon-General Edward J. Forster of Massachusetts, a special guest, entertained the company after dinner with a description of the medical department of the militia. The paper was an instructive one and gave a great deal of information to the members of the association. Captain Henry W. Lyon of the United States Navy was also a guest and gave a talk.

### GOT "SPICK AND SPAN" SODA FOUNTAINS.

Manager Henry A. Spavin, of the Low Tile Art Company, reports an active winter and early spring business. Salesmen and employees have been busy for weeks. The firm reports the following individuals and concerns supplied with their fountains: S. J. Briggs & Co., Smith's Hill, Providence; Towle & Rounds, Pine street, Providence; A. J. Casey & Co., Newburyport; F. M. Proctor, Somerville; C. A. Glancy & Co., Pawtucket, R. I.; F. M. Cotton, Waterville, Maine; Howard Drug Company, White River Junction, Vt.; W. H. Flynn, Bridgeport, Conn.; C. F. Carlson, Quincy; Henry Hughes, Chelsea; N. E. Chapman, West Newton; H. F. Thompson, Dorchester; W. B. Chaffee, Providence; E. I. Wadsworth, Stoneham; C. F. Blanchard, Lowell; W. M. Kenney, Ware; J. D. Sutherland, Providence; R. M. Jennings, Hyde Park; C. A. Faxon, Cambridgeport.

## DOWN ON CIGARETTES.

The following act to prohibit the manufacture and sale of cigarettes and cigarette tobacco has been passed by the Massachusetts House:

SECTION 1. No person or corporation shall manufacture or sell cigarettes or cigarette tobacco in this commonwealth.

SEC. 2. Any person or corporation violating the provisions of this act shall be fined \$100 for each offense.

## APPOINTED NAVAL APOTHECARY.

Fred Menard, who has been drug clerk for W. J. Vizard, East Brookfield, for about a year, has been appointed apothecary and assistant surgeon on board the United States warship San Francisco. He left last Monday to report for duty.

## Among the Trade.

H. E. Wilkins of Stoughton has made an assignment to Henry E. W. Britton.

Charles H. Jagger, a Chelsea druggist, has had a mortgage of \$1,500 foreclosed, and has been sold out under the hammer.

Improvements are being made in the attractive store of Norris, the druggist in Hyde Park.

An addition to the large brick building on Broadway, Cambridgeport, belonging to Henry Thayer & Co., will be erected this spring.

A few evenings ago a thief broke into the Ocean Pharmacy at Nantasket Beach and carried away a quantity of fancy goods and perfumery.

A new sign at 37 Franklin street, Boston announces that Dowd, Blake & Co., importers and dealers in druggists' sundries and fancy goods, have established themselves there.

The Green street drug store in Fitchburg is now open. William D. Johnson, for 11 years with A. H. Burgess, and Walter F. Joseph, are proprietors. Both young men are well known to the trade.

A \$2,500 fire occurred in the store of Daniel M. O'Brien in the Savings Bank building, at Rockland, Maine, a week or two ago. The loss is fully covered by insurance.

A little girl in Fitchburg found a bottle containing tablets of strychnine and ate about 25 of them, thinking they were some kind of candy. The child became paralyzed and died soon after.

Chadwick's drug store will open up in Boyle's new block on Water street, Fitchburg, this week. It will be a finely fitted up establishment, and its proprietor has had a long experience in the drug business.

George Waters, clerk in Marshall's drug store in Beverley, had the misfortune to cut the index finger of his right hand while at work in the laboratory the other day. The surgeon was obliged to take three or four stitches.

The capital stock of the Thomas Hollis Company of Boston is \$20,000. The directors are Thomas Hollis, president; Francis Hollis, treasurer, and Charles H. Cole. The company will carry on the wholesale and retail druggist business.

The drug business at 144 Water street, Fitchburg, formerly known as Flanagan's pharmacy, has been bought by L. O. L'Esperance and T. J. Burns. Mr. L'Esperance has had many years' experience in the drug business and will give his personal attention to the prescription department.

During a settlement that has been pending the last few weeks the drug store of P. Cahill in West Water street, Weir, Taunton, was closed. It has now been reopened by a business man of that village city and James Heary has been engaged as clerk.

A new drug store has just been opened up in the building at the corner of Main and Cambridge streets, Charlestown, by J. Ernest Berry, who was for seven years an assistant in the Sullivan square drug store. The new store will be finely equipped and an entirely new line of drugs, medicines and fancy goods put in.

It is expected that the great plant of the White Spirit Company in this city will start up without further delay. The company owns property at the North End valued at \$1,000,000. The buildings are substantial structures and the wharf and dock are new and splendidly constructed. The company's steamer lies at the pier and will be in commission early in the spring.

For the last 24 years Fred. I. Hopkins has occupied the store at the corner of Essex and Chestnut streets, Lynn, and has always "been on deck" with his patrons. He has now leased for a term of years the store in the new Odd Fellows' Building at the opposite corner, and will move into it in about three weeks. He is having it beautifully fitted up and when it is completed it will be one of the finest in Essex County.

Andrew J. Casey & Co. have opened their new drug store in Market Square, Newburyport, and named it the Central Pharmacy. It is a model establishment, the interior decoration being in white and gold. Everything in the drug line in the store is new and up-to-date. The senior proprietor of this establishment was one of the city fathers for five or six years and is prominent in social organizations.

## DOWN EAST NEWS.

W. A. Bibber, a well known Richmond, Maine, druggist, was married recently.

R. J. Kincaid & Co. have opened a new pharmacy in Mars Hill, Maine.

A gem of a store has been recently opened at Fitchburg, Mass., by Chadwick & Co. The fixtures are by Bangs.

John Sexton of Chicopee opened a branch pharmacy in Winchester Park, Springfield, last week.

Norton's store in Rockland, Maine, will be leased by druggist Newman for his business.

George F. Sanborn of Meredith, N. H., has placed new fixtures in his store and otherwise improved the interior of his establishment.

A fire in the drug room of the Silver Spring Bleachery, on Charles street, Providence, R. I., two weeks ago, occasioned a loss of about \$20,000, covered by insurance.

H. O. Miller of Bangor contemplates a trip South for his health's sake. He is the owner of a fine steam yacht, which he would like to dispose of before leaving Bangor.

C. A. Fowler, of C. A. Fowler & Co., Bangor, enjoys a great reputation as a patron of the national game, and he is one of the directors of the Bangor Baseball Association. He plays a great game him-

self, and predicts first place for the Bangor nine in the New England League games.

A brick block in St. Croix Valley, Maine, has been purchased by Charles McQuinch, the Main street druggist. Important alterations will be made in the building, and the corner store will be occupied by Mr. McQuinch for his drug business.

Mark C. Morrisson & Co. of Bar Harbor have purchased the entire stock and fixtures of Woodward Bros., druggists, with the intention of moving them to Bar Harbor. It is reported that the new owners may decide to carry on the store in connection with their Bar Harbor store.

Roussau & Brown, druggists, Woonsocket, R. I., have taken possession of their new store in Slocumb's new block, on Main street. The store is 60 feet deep and has a width of 28 feet. All the appointments are of the finest description, the soda fountain being one of the most costly in the State. Without question the store is the best in Northern Rhode Island.

## Druggists as Minstrel Entertainers.

In Keene, N. H., the druggists seem to be full of wit and humor, and on special occasions delight in entertaining the good people of Keene with their versatility. On February 5 the local cycle club needed funds, so they decided to get up a minstrel show. About 12 o'clock on the day set for the entertainment the participants promenaded the streets headed by a brass band. All wore silk hats, though many of the hats did not seem to fit the wearers very well. This seemed to amuse the ladies, who thronged the sidewalks to witness the parade and pick out their brand in "toppers."

The entertainment was enjoyed by a full house. Frank Dort, of Dort & Co., played one of the tambourines. His sketch on "the horse-carriage and owner" (the latter much addicted to swearing) was thoroughly enjoyed, as was also his joke on the ex-governor. Wm. Burt Thorning, prescription clerk for Dort & Co., played one of the Bones, and delighted the audience with his joke on "Flossie."

Mr. Dutton, of Aldrich & Dutton, also played one of the Bones, and said his "say" well.

Will A. Steele, representative of Chamberlain Medicine Company, Des Moines, Iowa, sung "The Spider and Fly" with much spirit, and was vociferously encored.

## New Incorporations.

Hugh McBride and M. A. Little, druggists, of Des Moines, Iowa, have incorporated their drug business under the name of McBride & Little. The articles of incorporation place the capital stock at \$10,000.

The Kinsey Drug Company of Newark have filed articles of incorporation. John L. Kinsey, Charles I. Bolles and George W. Byram are the incorporators. The capital stock is \$50,000.

The Tropical Fruit Chewing Gum Company of New York City have been incorporated, with a capital of \$16,000. Directors, Joseph Allen, John C. Hummer, S. H. Tiffany, George Damon and Charles F. Thomas.

## PENNSYLVANIA.

## SOCIAL MEETING OF THE ALUMNI.

PHILADELPHIA, March 5.—At the regular social meeting of the Alumni Association of the Philadelphia College of Pharmacy, held on February 28, Prof. Arthur W. Goodspeed of the University of Pennsylvania gave an interesting talk on facts and theories brought out by the recent investigations in the line of Prof. Roentgen's discovery of the effect of the cathode rays. Prof. Goodspeed exhibited a number of photographs taken by him in the course of investigations. He showed a radiograph of a diamond ring, which seemed to demonstrate that the X rays had been reflected. In explanation of the action of the rays, he said it was possible that the molecules of air in the Crookes tube were driven through the glass, in support of which theory it was known that tubes by use became more exhausted until no phosphorescence was produced. He said, however, that Dr. Lodge had abandoned the material theory and believed the effect was produced by longitudinal vibrations in the universal ether beyond the ultra violet rays. If this should prove to be true, it would open up a new and wide field for experimental research.

Referring to its uses for diagnosis, Dr. Goodspeed stated that at present it was not feasible to photograph through a greater thickness than the hand, although one case had been reported of a radiograph through the leg.

## A BOTANICAL FIND.

Dr. Miller, of the firm of Aschenback & Miller, is considered one of the leading botanists of this city, and his views on anything relating to the floral kingdom are accepted without question. He is a frequent seeker for new plants, and is generally the first to find the signs that denote that spring is approaching. On February 28 Dr. Miller, while making one of his botanical explorations in the Bartram Gardens, in the southwestern section of the city, discovered the *eranthis tirmalis*, commonly known as winter aconite. This plant is somewhat of a curiosity in this country, as it belongs to Europe; it was brought here a hundred years ago by the Bartram family, and planted in their garden, and has now become acclimated. It is quite a novelty, and Dr. Miller was jubilant over its discovery.

## COMMITTEES OF THE DRUG EXCHANGE.

The following committees have been appointed by President Hance of the Philadelphia Drug Exchange:

Legislation: Alexander H. Jones, chairman; Mahlon N. Kline, Henry N. Rittenhouse. Publication and Trade Interests: Henry N. Rittenhouse, chairman; Richard N. Mattison, M. D.; Charles E. Hires. Room: Harry B. Rosengarten, chairman; Henry C. McIlvaine, Mahlon N. Kline. Membership: Jno. Ferguson, chairman; Walter V. Smith, Clayton F. Shoemaker. Arbitration: Robert Shoemaker, chairman; William Gulager, Alex. H. Jones, Harry B. Rosengarten, Harry B. French.

## EFFECT OF THE DETROIT PLAN.

The action of the N. W. D. A. in securing a number of the most prominent preparatory houses to go into the Detroit plan has resulted in considerable cutting throughout the trade. While the action is a favorable one to the jobbers it is claimed that the retailers are not bene-

fitted, and for that reason this class are raising many objections. The Detroit plan was devised to prevent the cutters from securing goods at a cheaper price than the small retailers. It appears, however, that this result is not produced, as cutters can buy in large quantities and get their discounts, while the small retailer has to buy in smaller lots and pay very nearly the same price at which the cutter sells.

Besides this a number of houses who have kept certain proprietary goods are now dispensing with them, and it is thought that there will soon be a break and the goods will be sold to the retailers as well as the jobbers at the same price as heretofore.

## ANTITOXIN RESULTS.

The H. K. Mulford Company are doing a very large business with their antitoxin. Mr. Mulford has just returned from a successful trip throughout the West and South, where he has established agencies for the sale of this article. It is the intention of the house to have their agencies in certain sections of the country, so that a fresh supply of goods can always be obtained. Many of the leading cities have adopted the antitoxin, and the firm are somewhat jubilant over the report received from the Board of Health of Chicago. The report is as follows:

## REPORT OF HEALTH BOARD OF CITY OF CHICAGO.

On August 31, 1895, Health Commissioner Wm. R. Kerr published a statement showing the death rate from diphtheria in the city of Chicago to be 53 per cent. of all cases reported. In his latest report, made on January 10, 1896, are found the following figures:

The number of cases of diphtheria visited at request of attending family physicians, from October 1, 1895, to January 1, 1896 (3 months)..... 1,109  
Number of charity cases (no physician in attendance)..... 52

Total..... 1,221  
Number found convalescent on arrival..... 68  
Number found dead on arrival..... 50  
All other cases..... 1,104

Total..... 1,221  
Number found suffering from diphtheria and treated with antitoxin..... 1,047  
Number in which antitoxin was not used..... 61

Total..... 1,108  
Number recovered under antitoxin treatment..... 961  
Number died under antitoxin treatment..... 58

Total..... 1,047  
Death rate under antitoxin treatment, per cent..... 8.98  
Number in which antitoxin was refused..... 61  
Of these there died..... 32  
Death rate where antitoxin was not used, per cent..... 52.46

Results of antitoxic treatment in 805 cases of true diphtheria (bacterially verified):

Treated on.	Total.	Recov- ered.	Died.	Death rate per cent.
First day of disease...	61	61	0	0.00
Second day of disease...	187	184	3	1.60
Third day of disease...	372	362	10	2.68
Fourth day of disease...	109	92	17	15.60
Later than fourth day	76	54	22	28.95
Total.....	805	753	52	6.46

Number of children and others exposed to the disease and treated with the protective dose of A. T..... 810  
Number of those who subsequently contracted diphtheria..... 4

It will be seen from the above figures that the death rate under the old methods of treatment was 53 per cent. of all cases reported, and that under the antitoxin treatment this has been reduced in three months to less than 9 per cent. It is frequently claimed by those not in

favor of the antitoxin treatment that the reduced mortality in the treatment of diphtheria is due as much to the better handling of the old remedies as to the value of antitoxin. An emphatic denial to these assertions may be found in the above figures, which show that among these 61 patients who refused the antitoxin treatment the death rate was 52.46, or almost exactly the same as before the antitoxin treatment was introduced. This proves conclusively that when treatment by antitoxin is neglected the mortality flies back to the previous high rate.

## Quaker City Jottings.

Louis Sorber has bought out the store formerly conducted by Mr. McCormick at Tenth and Fitzwater streets.

Charles Povinsky is laying in a supply of drugs and sundries in the new store which he will shortly open at Shenandoah.

Martin Grubler of Shenandoah has added to the attractiveness of his store by the addition of a very handsome Low Art tile apparatus.

Dr. Adolph W. Miller gave an interesting lecture on perfumes before the Lotus Club, at the residence of Mrs. Martin, 1085 Walnut street, February 11.

E. E. Meyer of Wellsboro, Pa., has formed a partnership with Fay Howd, who has clerked in the store for some time, and the firm name is now Meyer & Howd.

J. Lawson Crothers, the well-known druggist at Twentieth street and Fairmount avenue, comprised one of the party of the jolly crowd that went to Washington on the invitation of the Philadelphia Produce Exchange. Mr. Crothers had a fine time and is benefitted by his few days' recreation.

The senior students of the Philadelphia College of Pharmacy have no time for pleasure now, as they are cramming themselves so that when the examinations begin on March 28, they will be prepared to pass. The practical examination of the first year's class in botany and pharmacy took place on March 5, and the regular examination of this class is to be held on the 10th inst.

J. F. Demoville of Demoville & Co. of Nashville, Tenn., dropped in the city on February 17. Mr. Demoville came here to lay in a large supply of drugs as well as a soda water fountain and sundries. It seems that he brought a cold wave with him, as when he left home the thermometer registered 60 degrees and when he arrived here it was 2 degrees below zero. On this account his stay was short, and he hastened back to a warmer climate.

Wm. Speakman, who has been connected with Bullock & Crenshaw for a number of years, and since the death of Mr. Crenshaw has been general manager of the wholesale department, will retire from that house on or about April 1. Mr. Speakman has had in view this move for a long time and the first of the year he notified the firm of his contemplated withdrawal from the house. It is his intention to go abroad and spend several years. What he will do when he returns he has not made up his mind.

The gold craze which has affected the whole world, especially England, in regard to its Kaffirs, and the people of this country in relation to Cripple Creek, has

inoculated the druggists as well as the rest. John Ogden, who for a number of years conducted and operated the drug store at the northeast corner of Thirteenth and Walnut streets, is now trying the gold cure. He recently disposed of his store and at the present time is in Cripple Creek district located as an assayer. Mr. Ogden is well up in this branch, and his friends wish him all the success possible.

Chas. Lippincott & Co. have secured the four-story building at 980 Arch street, which is to be devoted exclusively to showing off their soda water fountains. Their old building at 925 to 929 Filbert street is now devoted to manufacturing purposes only. The show rooms and salesmen are under the direct supervision of John H. Fredericks, who also has under his supervision the territory of Eastern Pennsylvania, New York and New Jersey. This firm has just received orders for two \$10,000 fountains; also for H. H. Cassabeer, for his store at Seventy-fifth street and Madison avenue, New York. This is to be a counter fountain, and will be similar to those in use in the other stores of Mr. Cassabeer. Also a new \$3,200 fountain at 1218 Market street, this city, and a \$2,200 Onyx fountain for Daniel Harris at Fortieth street and Girard avenue.

### Pittsburgh.

PITTSBURGH, March 5.—A representative of Chas. Lippincott & Co. of Philadelphia, the well-known manufacturers and dealers in soda water fountains of the Quaker City, together with several workmen, has been in Pittsburgh for the past few days. The former is superintending the construction of a handsome new soda water fountain in the drug store of Amil J. Stybr, corner of East and Royal streets, Allegheny. The fountain is composed of Tennessee marble, and will have the very finest of onyx trimmings. The cup-holders are to be of solid silver, and the glasses the best quality of cut glass. Lippincott & Co. have put in several fountains in this city and Allegheny, but their representative declares the one now being furnished Mr. Stybr will outshine anything of the kind ever seen in either city.

Henry G. Smink, a son of W. H. R. Smink of Shamokin, has been admitted to partnership in his father's drug business, the new firm's name being W. H. R. Smink & Son.

D. M. Bennett, the well known Allegheny druggist living at 161 Grant avenue, suffered one of the heaviest losses that can befall a man when his wife, Matilda Carson Bennett, died on Friday last at the home of her parents, H. M. Carson of Reynoldton. While Mrs. Bennett had been ill for some time, yet her death was entirely unexpected, as it was not thought for a moment that her condition was serious until the Thursday preceding her demise. The couple had been married just a little over a year.

W. H. Beazell, one of the leading druggists of this city, and Reed Kennedy, of the real estate firm of Kennedy & West of Homestead, returned to the city during the week from a two weeks' hunting trip in Central Mississippi. The hunters brought with them several hundred quail and one deer, also armed with an affidavit to back up their assertion that the game was not purchased of the nearest dealer in poultry, game and fish, but was

actually the result of their skill as hunters and marksmen. Speaking of their trip, Mr. Beazell said that game in Central Mississippi is remarkably plentiful, and hunting it affords an abundance of good solid sport.

## OHIO.

CINCINNATI, March 5.—Robert J. Effinger, the druggist at Clark and Baymiller streets, was ordered sent to jail the other day for failure to pay his wife \$125 alimony awarded her by the court a short time ago. Effinger was ordered to pay his wife \$25 a month, and it is claimed that he has failed to comply with the order of the court.

### A Few Snap Shots.

Chemist John A. Westenhood died a few days ago.

A firebug tried to destroy Geotxe Bros. pharmacy in Lockland recently.

Kentucky is to have a pharmacy law similar to the measure in this State.

Karl Kuhlman has left Weatherhead's pharmacy, where he has been acting as night clerk.

James M. Land, a minister at Harrison, Ohio, who also owned a drug store at West Harrison, Ind., made an assignment a few days ago.

B. F. Price, a Lancaster druggist, was talked of as a witness in the investigation going on at Columbus before the General Assembly.

Under the present law druggists in places of less than five hundred need not be registered. This clause is to be stricken out.

It is claimed that Food and Dairy Commissioner Luebbing threatened to bring 100 suits against the Stein, Vogeler Drug Company on account of the activity of Alfred Vogeler in working against the commission.

Andrew Schmittauer, the well-known druggist at Sixth and York streets, Newport, made an assignment the other day. The cause of the failure was said to be dull trade and slow collections. Schmittauer is one of the best known pharmacists across the river.

The Cincinnati College of Pharmacy elected officers as follows last Tuesday night: President, John Ruppert; Corresponding Secretary, Andrew Bain; Recording Secretary, William Simonson; Trustees, Julius Greyer, Albert Wetterstroem, Louis Klayer, John Koenig, A. Fiber, Louis Sauer, George Egar and Otto Betz.

## MICHIGAN.

DETROIT, MICH., March 8.—Ever since Stevens & Todd were forced out of their central location by the big Mabley & Co. building, they have been hunting around for another location. Last week they opened up at 153 Woodward avenue, only a few doors north of their old location. The store has been thoroughly remodeled, and is modern in every respect. The fixtures are all of mahogany, the carvings of the most beautiful designs. On the right as one enters is a handsome mantel and grate, the facings of which are of Mexican onyx. The soda fountain, which is a beautiful and intricate affair, is near

the front of the store. Another special feature is an elaborate and extensive arch across the rear of the store through which a passage is afforded to the second story. The decorations are in relief work, the colors being cream, Nile green and gold leaf. The floor is of marble mosaic of a very light shade. The prescription department is entirely separated from the rest of the store.

### Michigan Mention.

George D. Ford, for many years in the drug business at Coldwater, recently died.

George Eddy announces that he will shortly open up a drug store at Hart.

The drug store of Dr. D. E. Newcomb of Carleton was recently burned.

M. J. Smith of Podunk has been succeeded by Herbert Mack.

Frank E. Bell succeeds Bell & Randall, Rose City, in the drug business.

Dr. D. E. Newcomby of Carleton, Mich., lost his drug store by fire last week. Loss, \$900.

L. Perrigo & Co., who were burned out at Allegan last week, have opened up in new quarters and with a full stock.

Dr. Henry Lever has purchased the stock of drugs owned by I. R. O'Dell at Fremont.

W. R. Outler's drug store at Ionia was recently damaged to the extent of \$2,000 by fire.

A. D. Smith has purchased the drug store of Emmet C. Smith at 153 Canfield avenue, East, Detroit.

T. O. Bennett & Co. is the style of a new firm of druggists at Milford. Mr. Bennett was formerly a clerk for J. S. Hewitt of that place.

Charles G. Foster has bought from the widow of A. Roche, deceased, at Concord, the drug store which formed part of the estate left by Mr. Roche.

Shelby had four drug stores, which was considered one too many, so George Eddy and Dr. Stringham pulled out and removed their business to Ferry.

Archibald Reid, a pharmacist at the corner of Joseph Campeau avenue and Champlain street, has been arrested on the charge of having violated the pharmacy law.

F. G. Thiers has sold his drug business at Elsie, and will remove to Mt. Pleasant. The store has been taken in charge by Nelson Pearce, a former clerk for Mr. Thiers. Valentine Thomas of Grass Lake is the registered pharmacist.

Frank W. White, who has for several years acted as secretary of the drug house of A. H. Lyman & Co. at Manistee, succeeds the late A. H. Lyman as president of the corporation. The position of secretary has been filled by the election of T. J. Ramsdell, the banker.

Richard Loew has purchased the drug store at Saginaw, owned by City Treasurer Melchers. The store is located at the corner of Jefferson and Genesee avenues. Mr. Loew has been practically in charge during Mr. Melcher's incumbency of office and has a wide circle of friends.

L. M. Watson, who came to Allegan in 1889 and started in the drug business, was recently burned out, but last week he opened up again on a larger and more generous scale than ever. The store has

been refitted with new shelves and stocked with drugs. Mr. Watson says he feels proud of his new business.

Robert W. Cochran has a tale of woe to relate. He went to Cedar Springs a few weeks ago, and put in a neat stock of drugs and groceries. Last week he was arrested for preparing prescriptions without first having obtained the required certificate. Shortly before coming to Cedar Springs he was married. He is all broke up, and is thinking of quitting the business.

A meeting of the manufacturing chemists of Detroit was held at the Hotel Cadillac recently to consider the feasibility of organizing a manufacturers' clearing house for the mutual protection of the manufacturers in relation to the trade. Among other features considered is the publication of a black list or a system of ratings for protection against undesirable customers. This organization will probably be perfected soon.

Stevens & Todd have commenced suit for \$5,000 damages in the Wayne Circuit Court against Madame M. Yale, the woman who lectures on the subject of preserving beauty. The druggists claim that a year ago Madame Yale contracted with them to handle her goods exclusively in this city, and a part of the agreement was that the name of the firm was to be inserted in all advertising matter. The agreement, the plaintiffs claim, has not been kept.

W. L. White of the well-known firm of White & White, druggists, at Grand Rapids, will shortly come to Detroit to act as business manager for Leonide Keating, a physical culture teacher. He will spend two months in Detroit and the other two in Grand Rapids. Mr. White has been actively identified with the drug trade for the last 20 years, and during that time has not been absent from business more than a week at a time. The next four months will therefore be in the nature of a rest.

The employees of Parke, Davis & Co. organized a sick benefit association just four years ago, and it has flourished ever since. It is made up exclusively of employees, and when one of them severs his connection with the firm, he does so with the association. The association pays a weekly sick benefit to members not able to work through sickness or accident, each member paying a monthly assessment. At present there is a nice balance in the treasury. During the summer months excursions, parties, etc., defray nearly all the expenses. On February 11 the ladies of the society held a well-attended leap year party, and it is understood that several weddings will shortly be the result.

Among the recent commercial visitors to Detroit were the following: E. C. Demarest, R. J. Waddell & Co., glue, sandpaper and similar goods, New York; Charles W. Griffiths, the Hersch & Frerichs Chemical Company, St. Louis, Mo.; W. Landman, Fleischman, distillers, Cincinnati; Thomas M. Curtius, Stallman & Fulton, New York; Percy L. L. Coombs, Henry Woods' Sons Company, colors, Boston; W. W. White, Roessler & Haslacher Chemical Company, New York; James Hazlett, Reed & Carrick, New York; Wm. Newcomb, Hygienic Chemical Company, New York; George O. Tanguay, F. A. Reichard, New York; Mr. Barker, Buffalo Foundry Supply

Company; J. W. R. Pierce, Burrough Bros. Manufacturing Company, New York; Mr. Martin, Merck & Co., New York; Mr. Heisters, George Lueders & Co., New York.

## ILLINOIS.

CHICAGO, March 8.—The ordinance compelling street cars to stop on the near side of crossings has after a few weeks' trial been repealed, and on the 20th the cars began stopping at the far side. This has gladdened the hearts of many druggists, who have restored the sign "Come in and wait for the car."

### NEATLY CATCHES AN INTRUDER.

H. D. Cole, manager of the Graves drug store, at Ellis and Oakwood avenues, was aroused from sleep at 5 o'clock on the morning of February 19. He grasped his revolver and running outside found Louis Davis, colored, half way through the window which he had broken with a brick. Cole, at the muzzle of his revolver, held Davis where he was until a policeman arrived and arrested him.

### SHE WANTS \$25,000 FOR BREACH OF PROMISE TO MARRY.

Barbara Heilen, a nurse, has sued Henry G. Engels for \$25,000 damages for breach of promise to marry her. Engels was a druggist in West North avenue when the plaintiff met him a year ago in the course of business, and the acquaintance ended in an engagement, which the plaintiff says has been broken by Mr. Engels.

### DRUGGIST THOMAS WARNED.

City Collector Maas yesterday morning sent notice to Fred. J. Thomas, a druggist at Jackson boulevard and Western avenue, that he must take out a retail liquor dealer's license or submit to the infliction of a fine. One of the city inspectors said he succeeded in buying whisky at the drug store, with no questions asked.

### THE TELEPHONE SITUATION ON FORTY-THIRD STREET.

There is merry war, dismay, courageous self-congratulation and stubborn resistance down on that portion of Forty-third street running east from Cottage Grove avenue to the lake. The three drug stores at Cottage Grove avenue and Forty-third street, namely, the T. N. Jamieson, M. T. Moss & Co. and W. B. Tuteur pharmacies—mark the eastern limit of the free telephone district on Forty-third street. And that is why Kenwood is wroth, and why much of the trade of that section goes as far as Forty-third street to do its shopping. It remains to be seen whether the defection will be more than temporary.

### News Jottings.

J. M. S. Wilser & Co. are putting in a new stock at Grandin.

A. R. Lewis returned here from an Eastern trip on Saturday last.

Chicago, Ill., should go to what city in order to feel better? Baltimore, MD.

Frank Pyatt has opened a new pharmacy at the corner of Canal and West Monroe streets.

Hermann Fry will open a new drug store at the corner of North Clark and Larrabee streets about March 15.

A. E. Remick, manager of William R. Warner & Co.'s branch here, left for St. Louis on Saturday on a short business trip.

The Thompson Phosphate Company have just completed a new system of bottling for their goods; by its use the capacity is increased four fold.

T. F. Thornton, M.D. has purchased the drug store at the corner of Forty-third street and Oakenwald avenue from A. B. Eads and has refitted the store completely.

B. B. Borden, druggist, of Plainfield, Wis., was in the city during the week on his way to Florida, where he will spend a few weeks.

George L. Rives, formerly with Sharp & Dohme, has been appointed the Chicago agent of the Springer Torsion Balance Company, with offices at 193 Randolph street.

A. G. Vogeler, editor of the *Western Druggist*, gave a lecture before the Chicago Society of Anthropology on Sunday, the 16th. His subject was "Evolution in Animal Life."

The Neidert Chemical Company have been incorporated to manufacture flavoring extracts, with a capital of \$9,000, by William H. Neidert, Arista B. Williams and Percy V. Castle.

Alterations in the building 196 Randolph street will be started in a few days and John F. Maathes, Chicago manager of Whitall, Tatum & Co., hopes to occupy the premises early in April.

Within a few days the blank walls of this city will be improved by the placing of an artistic poster thereon, advertising the merits of Johnson & Johnson's belladonna plasters, which always "touch the spot."

Judge Dunne granted a motion to quash six indictments against Thomas Loergan and two against Carl Stam. The defendants were indicted recently with 200 other druggists on charges of violation of the State Pharmacy law.

The Valhalla Mfg. Company have been obliged to enlarge their premises in order to keep up with the demand for their goods. They have leased the building adjoining their present premises, so that their address is now 228 to 232 Washington boulevard.

A. G. Thompson, president of the Thompson Phosphate Company, has been confined to his house by a bad attack of inflammatory rheumatism for several weeks. He was able to return to business for a few days last week and is steadily improving.

The new drug stores of Gibbons & Pentony, at Ryan, Iowa; Thomas Roberts, Churdan, Iowa; Warner & Lieber, Billings, Mont.; Dr. J. Nichols, Atlantic, Iowa; C. W. Shotwell & Co., Revere Pharmacy, North Clark and Michigan streets, Chicago, all purchased their entire outfits from Morrisson, Plummer & Co.

A very catchy souvenir was sent to the Western trade recently by George H. Rives, agent for druggists' specialties. It consists of a card with an old horse-shoe, with nails printed on it, and the left hind foot of a graveyard rabbit, killed in the dark of the moon by a left handed crosseyed coon, neatly attached and tied



with a silk ribbon. We hope that both the receiver and sender will find this a genuine mascot.

Victor Barothy, the Western agent of the Low Art Tile Company, last week sold the largest soda fountain ever placed in a Chicago drug store. It is 15 feet long and has 40 syrup taps, eight mineral water and four soda arms. Three large plate glass mirrors are set in the tile top, the design being one of the handsomest ever seen. This fountain, which was sold for \$8,200, will be placed in the new drug store of C. W. Shotwell & Co., at the corner of Clark and Michigan streets.

The body of Henry Schaller, the Lincoln avenue druggist, who disappeared in November last, was found floating in the lake at the foot of Randolph street on the afternoon of the 27th. The features were bruised and torn, but recognizable, the clothing was covered with sand, proving that the body had laid at the bottom of the lake for some time. Dr. George Schaller identified the body as that of his brother and said that "it was clearly a case of suicide, as he was despondent."

A "no" bill was voted by the grand jury in the case of Frank S. Tarbill, the Blue Island druggist who on February 9 sold Edward Hermer, 9 years old, 10 grains of morphine by mistake for quinine. The drug was given to the boy by his mother and resulted in the lad's death. Druggist Tarbill told the jury he received the morphine from Lord, Owen & Co., 73 and 74 Wabash avenue. He said it was in a package labeled "quinine." Tarbill exhibited the package he said he had received to the jury. A "no" bill was voted on the charge against him, and subpoenas were ordered for the members of the firm of Lord, Owen & Co., commanding them to appear.

### The Illinois Board.

At the February meeting of the Illinois State Board of Pharmacy, held in Chicago, 168 applicants appeared for examination, 47 of whom were registered as pharmacists, namely:

Elnathan Town, Easton; Frank P. Irwin, Danville; Walter N. Davis, Dwight; Walter J. Gartland, Elgin; Louis J. Steege, Dundee; Elwin E. Sennell, Dixon; William A. Clark, East Alton; G. W. Noechel, Morton; Percival V. Coover, Jacksonville; Edward B. Howland, M.D., Lockport; Archibald E. Rutherford, Chicago; Camillo Volini, M.D.; William C. Hornbrook, John Byrard, William F. Bacelan, Charles D. Scales, Ernest W. Pitt, Herman Masserek, John F. Venckz, Hermann C. Arndt, Frank H. Schwertfeger, Will E. Flack, Emanuel Komic, Charles E. Sutter, A. N. Peters, Carl V. Green, Charles J. Novak, Francis Forsyth, Jr., August H. Schroeder, Walter J. Barkey, Harry E. Norton, Joseph Roth, Thomas J. Toomey, Fred. B. Eyeleshymer, Herman H. Hubbard, Hoadly C. Hartman, Heinert Hetlesator, Percy H. Beattie, Edgar C. Kenyon, C. F. William Schults, Carl A. Biese, Godlove S. Orth, Frank C. Barnhart, Fred C. Starr, Ernest O. Crowe, Charles Pfeiffer, Otto Rohrbach, all of Chicago.

The next meeting of the board will be held in Chicago, at 173 Thirty-ninth street, April 14. Applications must be filed in the office, at Springfield, on or before April 4 for this examination.

### The Georgia Board.

The Georgia Board of Pharmacy will meet in Atlanta in the Capitol, March 24, at 9 a.m., to examine candidates for druggists' license. For further information address Dr. Henry A. Slack, secretary, La Grange.

## MISSOURI.

St. Louis, March 2.—E. A. Medler, Ph.G., the much respected druggist at Twenty-eighth street and St. Louis avenue, had some very unpleasant experience with a would-be customer a few nights ago when on duty alone. A man came in and called for five cents' worth of castor oil. This was kept in a front shelf bottle. While the proprietor was getting the oil he noticed the customer sizing things up pretty well. Shortly afterward the same party came back and called for a bottle of citrate of magnesia. This took the druggist into the laboratory, and while there he heard the cash register rattle. Hurrying out, he saw his customer going across the street at a two-forty gait.

Mr. Medler gave the alarm and several persons gave chase, but the thief ran down a dark alley and escaped. By the next afternoon they had found a policeman, and he started out to find the thief. Much to Mr. Medler's surprise the officer did find the money drawer some distance away in an alley. The officer looked quite disappointed when the druggist took the drawer apart and removed a \$2 bill. There was about \$40 in the drawer when the thief left with it.

### COLLEGE COMMITTEES.

At the last meeting of the board of trustees of the St. Louis College of Pharmacy the following committees were appointed: Committee on Commencement Exercises—Prof. Good, Wm. C. Bolm and Adolph Braun; Committee on Banquet—Adolph Braun, W. C. Waldeck and H. F. A. Spilker.

The commencement exercises will be held on Thursday evening, April 16. The board decided to permit any member of the Alumni Association to be present at the banquet given to the graduating class. The graduating exercises will be held at the Germania Theater. The secretary of the board was instructed to write to Surgeon-General W. J. Wyman of the United States Army, asking him to take favorable action on the bill to improve the condition of the pharmacists in the army.

### NON-GRADUATES TO HAVE A BANQUET.

There is a rule at the St. Louis College of Pharmacy that if a senior student has not clerked three years in a retail drug store, outside of the time he attends college, he is allowed to take all the examinations but one. The one exception is on Practical Pharmacy. When he has acquired this experience, he may come up with the next class, take this examination and graduate. Every year there are quite a number who are shut out in this manner. They see their classmates, for the past two years, receive diplomas and hold a banquet from which they are excluded. This year those members of the senior class who cannot graduate for want of experience have decided to give a banquet also. Out of the class of 78 about 15 are disqualified for graduation. They are making all arrangements and will probably have a lively time.

The question has been brought up whether or not to extend an invitation to the "failures" to join in this banquet. This will probably be done. The banquet will be held the same evening as that of the graduating class, but in a different section of the city.

### News Items.

B. J. Ludwig has started a new store on Lee avenue.

Otto Strub, Ph.G., has sold his store and is doing relief work.

A. S. Ludwig has sold his drug store at Lee and Pleasant avenues.

Joe Temm, Ph.G., is about the store again after his severe sickness.

Dr. Hatcher has sold his drug store at Twenty-third street and Washington avenue.

The Thierauff Pharmacy on Morganford road and Kansas street was recently closed by the wholesalers.

J. P. Graff is again moving his store, this time to the corner of Lee and Newstead avenues.

Joe Carey, Ph.G., who has been in Colorado for his health, will soon return to his old stand on St. Louis avenue.

Amiel Kuenster, Ph.G., sold his drug store at Shenandoah and Compton avenues the latter part of February.

Theo. H. Specht is settled at his new stand, Elliott and Sheridan streets, and reports business very satisfactory.

W. Townley Case, who looked after the western interests of Boehringer & Soehne, is laid up sick at St. Louis.

Ed. Drace, Ph.G., has accepted the position of head clerk at the Clinton Pharmacy, Grand and Phinney avenues.

J. L. Royston, Ph.G., Twenty-eighth and Olive streets, is putting in one of the finest soda water fountains in the city.

S. E. Smiley, Ph.G., a well-known St. Louis drug clerk, has gone down to run Dr. Higgenbolhm's drug store at De Soto, Mo.

W. D. Temm is moving his family from Grand avenue and North Market street to a handsome residence on Dickson street.

S. E. Barber, Ph.G., the popular North Side city salesman for the Meyer Bros.' Drug Company, has just recovered from a severe siege of sickness.

Thos. Layton, the well-known president of the Layton Drug Company, St. Louis and Grand avenues, contemplates a trip to California in the near future.

The Sturgeon Pharmacy at Broadway and North Market street, after changing hands several times within the past year, has been called in by the J. S. Merrell Drug Company.

R. S. Overstreet has sold his drug store at 927 Pendleton street and will probably retire from the drug business. S. O. Netherton is now wielding authority at this stand.

There will be a special meeting of the Missouri Board of Pharmacy in this city, March 28. Full particulars will be furnished by Secretary F. W. Sennwald upon application.

F. C. Pauley, Grand and Franklyn avenues, is giving his store a thorough overhauling. The painters are at work, and the decorations will be something to admire. Mr. Pauley is preparing for the summer trade.

The Century Building, which is now being erected at Ninth and Olive streets, will probably be the home of the finest drug store in St. Louis. These reports come from parties who have ordered the fixtures.

Mr. Fernow expects to sell his drug

store at Broadway and Market street in the near future and go into the manufacture of a line of his own preparations on which he has built up a large trade.

The two prizes offered to the members selling the most tickets to the entertainment and hop given by the Alumni Association of the St. Louis College of Pharmacy have at last been awarded. Ex-president Wm. C. Bolm and R. S. Vitt are now treating their friends to good cigars; thus their many friends are getting the benefit of the prizes.

W. E. Blackwell, who for some time has been running a drug store at De Soto, Mo., is now settled in his new store at Broadway and Soulard street, this city. Mr. Blackwell has shown his good taste and judgment in the arrangement of this store. The bright and artistic internal arrangement, the handsome large glass front, and the elegant floral decoration, together with the ingenious window display, to say nothing of the bright smiles of the proprietor, are enough to attract custom from far and near. This is a desirable location and will undoubtedly prove a profitable one to the young proprietor.

## HINTS TO BUYERS.

The line of summer specialties made by the Valhalla Manufacturing Company, consisting of wild cherry phosphate, root beer extract, etc., are advertised by them in this issue with prices which are within the reach of all.

John Phillips & Co., the well-known manufacturers of showcases, wallcases and store fixtures, have on exhibition at the salesroom of the Norwich Nickel & Brass Works, 142 Eighth street, this city, a sample of one of their most popular showcases, known as "A Silent Salesman," and visiting druggists are invited to call and inspect the same.

C. G. Bacon & Co. of this city is one of the few wholesale drug firms that refers to present business as up to their expectations. They say there has been a perceptible increase in the volume of business transacted during the past month. "The month of February has made a very good showing indeed, both as to volume and quality of trade," said Mr. Bacon to an AMERICAN DRUGGIST man, who looked in upon him the other day.

One of the most recent useful accessories to the soda fountain is the Grand Rapids Ice Cream Cabinet, as made by the Chocolate Cooler Company, Grand Rapids, Mich. Of convenient size, the Grand Rapids Cabinet forms a very ornamental addition to the soda counter and affords a convenient method of dispensing the cream. An illustrated catalogue containing a full description of this and other novelties in cabinets can be obtained on request to the makers at the address given.

The Heyman Company of 55-61 Canal street, Grand Rapids, Mich., are advertising some remarkably handsome showcases well adapted for drug stores. It is not often that elegance of design goes with low prices, but the Heyman Company quote the very lowest on the latest styles, and their cases are distinguished by their fine finish. If you contemplate a change or an addition to your showcases, and wish to see some novelties, write for one of their catalogues and price-lists, mentioning the DRUGGIST.

Deception is only absolutely impossible in photography. In that lying is out of the question. In order that those making inquiries as to the style of the Morford Register, the proprietors have had a large number of photographs taken of the register in different positions, and on and after the 12th inst. they will send to parties interested one or more photographs with their price list. There is no method of keeping cash and credit accounts that is better adapted to the requirements of the drug trade as that of the Morford Register. Write them, mentioning the AMERICAN DRUGGIST for particulars.

From Lehn & Fink, wholesale druggists and manufacturing chemists, 128 William street, New York, we are in receipt of a copy of their latest illustrated pamphlet on antitoxines. The new features of this pamphlet comprise additional pages on the double diphtheria antitoxine, an interesting report by Dr. Kelly on septicæmia, cured by streptococcus serum, and one by Dr. Chas. S. Wellington, regarding tetanus, successfully treated by antitoxine. Copies of this pamphlet can be obtained on request to the publishers.

The Damonia Company, Tacoma Building, Chicago, want to get into communication with one large dealer in every large town or city throughout the country, for the purpose of establishing special agencies. Only one dealer in every town or county will be given the agency, and the Damonia Company make the point that no one who desires to make money or build up a permanent paying business can well refuse to accept. Applications will be entertained from parties having good references or commercial ratings, and should be sent to the Damonia Company, Tacoma Building, Chicago.

A contrivance which will find favor with tourists, bicyclists, sportsmen and travelers generally is the "Witch Pocket Soap Leaves," which are put up in the form of a neat vest-pocket memorandum book, each leaf representing an individual cake of soap from which a most refreshing wash can be enjoyed as the occasion demands. Witch Pocket Soap Leaves are being introduced by the Interstate Coupler Company, Havemeyer Building, 26 Cortlandt street, New York, who offer to send sample books, postpaid, on receipt of 15 cents in stamps.

Henry Thayer & Co., manufacturing pharmacists, Cambridgeport, Mass., are offering an Emulsion of Cod Liver Oil with the Hypophosphites, containing 50 per cent of prime Norwegian cod liver oil, in bulk at \$1.75 per gallon, with a lower rate for larger quantities. Thayer's Emulsion of Cod Liver Oil is also supplied in 14 ounce bottles with their own or buyer's name on label, with handsomely designed lithographed wrappers, at a figure which leaves the druggist a fair margin of profit even in competition with the cheaper grades of emulsion. Perhaps you can effect a saving this year by writing to Henry Thayer & Co. for special quotations on quantity orders.

Careful housewives usually adopt measures at this season of the year to prevent the incursions of moths which come with the early spring and summer. One of the cleanest, most convenient and practicable methods yet brought to our notice consists of the Anti-Moth Bag, put up by the Osaka Camphor Company, 99 Maiden Lane, New York. So satisfied is the

company of the efficacy of the Anti-Moth Bag that they offer to give a guarantee with every bag of \$100 to any one bringing proof that moths have settled after having used it according to directions. Descriptive circulars of the specialties of the Osaka Camphor Company can be obtained by any druggist on application to the address given.

The American Silver Truss Company, Buffalo, N. Y., say if dealers who have not seen the American Silver Truss knew what perfect satisfaction they give, the company would require a factory nearly as large as the one to be built over the Niagara Falls, and thousands of people who to-day are experiencing torture through ill-fitting trusses would be made comfortable and happy. The American Silver Truss Company make arrangements with responsible houses for the exclusive sale of the truss in their locality and a liberal supply of pamphlets, circulars and so forth for distribution is always furnished. Pamphlets containing full instructions for the proper fitting of trusses can be obtained on application to the American Silver Truss Company, 290 Main street, Buffalo.

The attention of students contemplating a college course and living convenient to Albany is directed to the advertisement in this issue of the Albany College of Pharmacy. The course of lectures at this college begins October 5, 1896, and closes March 16, 1897. Like other recognized colleges the instruction given in the Albany College of Pharmacy consists of a graded course extending over two years and divided into senior and junior classes. Particulars concerning requirements for graduation and the prizes awarded can be obtained on request to the secretary, DeBaun Van Aken, 222 Hamilton street, Albany, N. Y.

The passing of winter should be a reminder to every druggist to prepare for the coming summer season. Efforts to increase the popularity of ice cream at the soda fountain demand increased facilities for the storage of this delectable compound, if the druggist cares to keep this trade. The cleanest and most convenient method of storing ice cream is found in the use of the Non-sweating Ice Cream Cabinets, as made by the E. T. Burrowes Company, Portland, Me. Users of these cabinets assert that they save their cost in ice and labor in one season, and by their convenience, cleanliness and attractive appearance draw and maintain trade.

Speaking of soda syrups, nothing has caught on with quite the same rapidity as crushed fruits. In serving this very palatable combination one of the most essential points is to serve it from a suitable container, and this is only possible with a dish made for the purpose. A. F. May & Co. of Cleveland, Ohio, advertise a very attractive imitation cut-glass bowl of half-gallon capacity, especially designed for this purpose. The cover is of extra heavy metal, triple nickel plated and unbreakable. By its use it is impossible for flies or dust to accumulate in the dish, and in addition to being a serviceable accessory to the soda fountain it furnishes an attractive ornament for the store. The bowls manufactured by A. F. May & Co. can be obtained in most instances through the wholesale trade, but parties failing to obtain them in this way should write direct to A. F. May & Co., Cleveland, Ohio.

### The Montreal Exposition.

Visitors to Montreal during next summer—and this will no doubt include many pharmacists—will find an especial attraction there in the shape of an international exposition which is to be opened on May 24.

### The Decision in the Hoff's Extract Case.

In deciding the case of Johann Hoff, a West Virginian corporation, against Tarrant & Co. of New York, in the United States Circuit Court last month, reference to which was made in our last issue, Judge Coxe decided that the costs of the suit should be shared by the contending parties, and Tarrant & Co. are permitted to go on using the label that they have been using since 1869, with the provision that the name Leopold be prominently printed on their label in addition to the signature of Leopold as manufacturer which has always appeared there. In answer to certain unfounded accusations brought by Eisner & Mendelsohn against the firm of Tarrant & Co. Judge Coxe handed down the following opinion:

The other accusations against the defendant are either unfounded in fact or relate to distinctions so unsubstantial and acts so trivial that the court could not condemn them without denouncing in equally strong, if not stronger terms, the statements not in exact accordance with the truth which from time to time have appeared on the complainants' labels and bottles. In other words, a finding which would compel all the changes asked for would by direct implication require the complainant to hold on the threshold of a court of equity.

### No Advance in Price.

Seabury & Johnson, manufacturers of plasters and antiseptic materials, 59 Maiden lane, New York, advise us that several of their retail friends suppose they have advanced the price of Seabury's Belladonna Plasters, as some jobbers are already charging an advance. S. & J. have made no change whatever, either in the quality of the plaster, which remains the Standard of the World, nor in the price, which is \$10 per gross.

### A Mammoth Catalogue.

What is perhaps the largest catalogue of drugs, chemicals and pharmaceutical preparations ever published has just been issued by the widely known firm of Morrison, Plummer & Co., wholesale druggists, 200 to 206 Randolph street, Chicago. The catalogue contains nearly 1,800 pages, one-fourth of which are devoted to the enumeration of articles commonly sold by retail druggists. The list is not confined to preparations manufactured or handled exclusively by the firm of Morrison, Plummer & Co., but includes descriptive reference to the pharmaceutical preparations of such firms as Parke, Davis & Co., Sharpe & Dohme, Searle & Hereth Company, B. Keith & Co., Wm. S. Merrell, and the Merrell Chemical Company. Paints and painters' brushes, including artists' materials, occupy some 100 pages of the catalogue, and another 100 are given up to an enumeration of patent medicines and proprietary articles, both domestic and foreign, with prices. Books for druggists occupy a separate department, and almost every text book of importance is listed and priced. Nearly half of the book is devoted to druggists' sundries, which includes glassware, fixtures, brushes, medi-

cine chests, perfumes, inks, scales and balances, and syringes. The publication of this catalogue and prices current must have entailed an enormous expense to the firm, but we suppose that the great territory from which Chicago draws demands a catalogue of this character, and the publishers will, undoubtedly, be justified in its publication by the returns.

### The English Drug Market.

London mail reports to date of February 22 quote as follows:

#### DRUGS.

*Aloes*.—East Indian dull. Low in mats, 11s. to 17s. 6d. Cape steady. Slightly burnt and drossy to good hard bright, 21s to 22s. 6d.; sandy, 14s. *Bucha Leaves* in good supply and easier. Short yellow, 2½d. to 3d.; short green, 3¼d. to 4½d.; long greenish, 4½d. *Beeswax* firm and rather dearer. East India, yellow Madras, £8 5s.; Mozambique, £7; Zanzibar dull gray to yellow and gray, £8 10s. to £8 17s. 6d.; Madagascar grayish, £8 15s. *Cardamoms* active at 2d. to 3d. advance. Ceylon Mysore character, bold pale, 2s. 9d. to 2s. 11d.; bold pale dull, 2s. 6d. to 2s. 7d.; medium and bold pale, 2s. 4d. to 2s. 5d.; small and medium to medium pale, 1s. 9d. to 2s. 2d.; pickings, 1s. 5d. to 1s. 6d.; split pale, 1s. 10d. to 1s. 11d.; brown, 1s. 5d. to 1s. 6d.; Mangalore pale medium, 2s. 5d. *Calumna Root* quiet. Ordinary dull, 9s. *Cinnamon Oil* quiet. Ordinary, 7d. *Guaza* easier. Fair rather stalky, 2½d. *Gum Myrrh* flat. Fair sorts, 55s. *Gum Ammoniacum*.—Palish block, 80s. *Gum Assafoetida* in excessive supply and demand poor at 10s. to 15s. decline. Good clean almondy, 67s.; pinky, 54s.; ordinary middling dark grayish block, part sandy, 28s. to 38s. *Nux Vomica* quiet. Fair, 6s. *Gum Benjamin* quiet, but good Sumatra brought high prices. Sumatra, middling false packed to good almondy, £8 to £8 17s. 6d.; Siam I, fine free tear, £23 10s.; block small, £8. *Gamboge* easy. Blocky pipe, £8 17s. 6d. to £9; pickings, very soft, £7 15s. *Dragons' Blood* dull, ordinary cake to fair seedy lump, £4 5s. to £6 5s. *Musk*.—Tonquin dull of sale. Cabardine dearer—Cabardine untrimmed, 15s. *Rhubarb* slow and easier. Canton flat medium to bold fair coat and fracture, 1s. 2d. to 1s. 3d.; round, 11d. to 1s. 1d.; Shensi, round small good trimming, 1s. 10d.; flat medium to bold fair coat, gray fracture, 1s. 2d. *Camphor* low. China, 165s. *Star Aniseed* easy; good, 90s. *Senna* steady. Dull yellow, 1d. to 1½d.; small and medium green, 2¾d. to 3d.; medium, 3½d. to 4½d.

#### CHEMICALS.

*Acids*.—Citric, 1s. 2½d. to 1s. 2¼d.; oxalic, 8½d.; tartaric, foreign, 1s. 2½d. to 1s. 2¼d.; English, 1s. 3d. *Cream Tartar*, first crystals, 105s. to 106s.; powdered, 108s. to 110s. *Alum*.—Lump, 5s. 7½d. to 5s. 9d.; powdered, 6s. 3d. *Benzole*.—Fifty per cent., 1s. 8d. to 1s. 8½d.; 90 per cent., 2s. *Bleaching Powder*.—Union price, £7 5s. *Borax*.—Crystals, £19 10s.; powdered, £20 10s. *Brimstone*, 5s. 4½d. to 5s. 6d.; foreign flowers, 6s. 8d. to 6s. 4½d. *Camphor*.—Refined, 2s. 4d. *Potash*, *Chlorate*, 4½d.; bi-chromate, 4½d.; prussiate, 8d. *Sal*, acetos, 5d.; ammoniac, firsts, 89s.; seconds, 87s. *Saltpetre*.—English refined in barrels, 21s. 9d.; in keg, 22s. 9d. *Soda*.—Ash, 1½d.; crystals, 42s. 6d., ex ship; caustic, 70 per cent. £8; bicarbonate, 7s.

8d. *Sulphate of Copper*, £15 15s. to £17. *Ammonia*, 24 per cent., in bags.—London, £8 10s. *Quinine*, 1s. 1d. *Sugar of Lead*, 25s.; English, 81s.

### Review of the Wholesale Market.

NEW YORK, March 9, 1896.

It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.

There are few important changes to be noted in the several departments of Drugs, Dyestuffs and Chemicals since our last review. The unfavorable weather conditions of the past two weeks has undoubtedly had a restricting influence on trade, and the movement of supplies continues of small dimensions. Importers and package dealers are, however, pursuing a conservative policy, and no effort appears to be made in any quarter to urge sales by price concessions. The general market is firm and we have few price fluctuations to report. Cod Liver Oil continues to reflect an upward tendency, and a further advance is anticipated. Opium has hardened a trifle in the interval, with an advance asked. Lithium Carbonate is higher. Citric Acid is fractionally lower. Oil Wintergreen, true, has advanced. The more important fluctuations are noted in the following table:—

ADVANCED.	DECLINED.
Cod liver oil.	Citric acid.
Opium.	Short buchu leaves.
Gum kino.	Jalap root.
Oil wintergreen.	Japan wax.
Lithium carbonate.	Guarana.
Cardamon seeds.	Oil peppermint.
Star anise.	
Carbolic acid.	
Picric acid.	
Blue vitriol.	

#### DRUGS.

*Alcohol* is without special change. Outside competition is practically nil and the trust producers appear to have full control of the market.

*Balsams* of the various kinds continue to meet with fair, steady inquiry, though no quotable changes in price have occurred. *Copaiba*, Para, is held at 85c. and Central American at 81c. to 82c. *Tolu* is nominally 45c. to 50c., as to quantity; *Canada Fir* about \$2.15 to \$2.25; *Oregon Fir* at 60c. to 65c. in barrels and 70c. to 75c. in cans; *Peru*, \$2 to \$2.80, as to quality and quantity.

*Barks* of the various kinds are jobbing fairly at about the line of prices that has ruled for some time past. *Cascara Sagrada* is quoted at 3¼c for new and 4¼c for old; *Elm* at 10c. to 11c.; *Soap* at 3¼c. to 3½c, and *Sassafras*, which is in particularly strong position, at 7c. to 10c., as to quality.

*Cacao Butter* continues held on spot at 81¼c. to 82c. The demand momentarily is only moderate.

*Caffeine* remains quiet, with stock offering from some holders down to \$5.75, while up to \$6.25 is quoted elsewhere. As may be inferred from this range the market is a trifle irregular and unsettled.

*Carbolic acid*, crude, has been offered to the trade at a reduction of two cents from the established price, but the article has proved on analysis not to consist

of the mixture of cresylic and carbolic acid which characterizes the true crude acid, and few sales were made.

*Cassia Buds* are in rather limited supply and quotations for high grade goods are firmer, 18c. representing the inside figure.

*Cod Liver Oil*, Norwegian, continues to advance in the foreign market, and values here have hardened materially since our last report, and none of the well-known brands are now offered below \$55. Advances from the fisheries in Lofoden report poor catches, caused by tempestuous weather. The livers are unusually lean and the yield of oil consequently less.

*Colocynth Apples* are in limited supply and pretty well concentrated. Prices are well sustained upon the basis of 65c. to 70c. for Trieste and 80c. to 82c. for Spanish.

*Guarana* has sold lower since our last, a few parcels having changed hands down to the point of 55c., though 60c. to 65c. represent the market for ordinary jobbing quantities.

*Juniper Berries* remain very steady at 13½c. to 2c., according to size of lot. Sales to the extent of 80 bags are reported at these figures.

*Glycerin* prices are well sustained in the face of a limited inquiry from consumers. Drums are held at 17c. while barrels and cases are quoted at 17c. to 17½c. and 18c. to 20c. respectively.

*Insect Flowers* continue quoted firmly at 18c. upward. The available supply is small and offerings are light. Prices for pure powder remain firm at our quotations.

*Morphine* develops no change of importance and meets with limited sales only. Speculative interest is wholly lacking and trade purchases are confined to small jobbing lots. Bulk continues quoted at \$1.45 to \$1.60, as to brand.

*Opium* has been rather more active during the past two weeks as a result of bullish advices from the primary market, which reported serious damage to the growing plant and quoted an advance in prices. Interest in the drug has subsided materially, however, during the past few days, and reports now indicate a decline in the Smyrna market as well as better crop prospects. The situation here is difficult to describe, so many influences being at work to affect prices. The market is characterized by a decidedly weaker undertone, and considerable uncertainty prevails as to the future course of the drug. At the close single cases offered freely at \$2.10, and there were rumors of sales at a fraction lower, say \$2.05; broken packages could be obtained at the same range. Powdered has not changed since our last and \$2.65 to \$2.75 will still buy ordinary quality.

*Quinine* continues dull, the comparatively low prices made on outside lots failing even to increase the distribution. Supplies from second hands are obtainable down to 26½c., with few holders quoting even figures. Quotations from manufacturers are firm at the range of 28c. to 30c., as to quantity and quality.

*Saffron* has been meeting with a fair, steady inquiry for American at 40c. Valencia is irregular and unsettled. Common has changed hands during the interval down to \$6, while high grade goods have brought as high as \$7 to \$7.25,

according to quantity. Alicante has sold fairly at \$4.75.

*Wax*, Brazil, is firmer and quoted 28c. to 30c. for No. 1; No. 2 held at 25c. to 26c., and No. 3, 20c. to 21c. Japan is in better supply and easier in price, with 7½c. to 8c. generally quoted.

#### DYESTUFFS.

*Aniline Salt* is in improved condition in the foreign market, but values here remain as heretofore, say 11½c. to 12c., as to quantity.

*Cutch* is meeting with about the usual jobbing demand, with the sales at 6c. to 8c. for box goods.

*Gambier* continues firm and in demand, with ship goods offering at 4.05c. and store 4½c. to 4¾c.

In other Dyes there is nothing new or interesting to report.

#### CHEMICALS.

*Alum* is neglected at the moment and only small jobbing sales are heard of, though prices are well sustained at the range of \$1.60 to \$1.75.

*Arsenic*, white, continues in firm position, with 6½c. to 7c. asked for Continental and English respectively.

*Blue Vitriol* has been advanced a fraction of a cent since our last, and 4c. is now quoted firm for round lots.

*Borax*, concentrated California, has sold to the extent of about a carload at a shade less than 5½c. Refined is steady at 5¾c. for round lots, with a moderate jobbing inquiry reported.

*Carbolic Acid*, crystals, are higher in the foreign market and net import cost of bulk is now about 16½c. In this market, however, purchases can be made at 15½c. to 16½c. for drums and 23c. to 28½c. for bottles.

*Brimstone*, crude seconds, has hardened a trifle and sales are reported at \$15; thirds are held at \$14.50.

*Citric Acid* is fractionally lower, though notably unchanged.

*Chlorate Potash* is quoted firmer by most holders, say 9½c. for crystals.

*Lithium Carbonate* has been advanced in price 50c. to 75c. per pound by some manufacturers.

*Nitrate Silver* is held higher by the leading manufacturers, 45½c. to 47c. being now asked, according to quantity.

*Nitrate Soda* has sold to a very fair extent on spot at \$1.70 to \$1.75, according to size of lot.

*Picric Acid* has marked a further advance, 24c. being now generally quoted.

*Quicksilver* shows some irregularity in price, with 51c. to 52c. the general quotation, though sales have been made, it is understood, at 50c. Flasks are quoted at \$37.50.

#### ESSENTIAL OILS.

*Anise* continues unsettled and quotations are slightly irregular, \$2.50 being quoted in some quarters and up to \$2.60 to \$2.65 asked in others. The foreign market is reported stronger.

*Cassia* remains quiet, but there has been no change from \$2.50 to \$2.60.

*Clove* continues in fair demand and values are steady at 45c. to 47½c.

*Orange* meets with steady, fair inquiry, with sales within the range of \$2.75 to \$2.85.

*Peppermint* continues irregular in price, with quotations of \$1.65 made for Western. The market is weak and a

firm bid on large quantities would probably be entertained at a lower figure. New York State brands offer down to \$1.70 to \$1.75 while HGH is held at \$2.15 to \$2.20.

*Wormseed* continues weak and irregular, without, however, any extreme price fluctuations. Western is held at \$1.70 to \$1.75 and Baltimore \$1.75 to \$2.

#### GUMS.

*Aloes*, Curacao, continues held in strong position, with 8¾c. generally asked for round lots to arrive and jobbing parcels 8¾c. to 4c. in store.

*Camphor* is very firm at 59c. for city refined, in barrels, and 60c. in cases; Japanese, in cases, is selling fairly at 58c. to 60c. Simes' prices were raised to 58c. for bulk compressed in cases, 60c. for ounce blocks, 58c. for flowers in barrels, 59c. in tubs, 60c. in 1 pound packages.

*Chicle* continues in good receipt and supplies are offering at the range of 36c. to 37c., as to quantity.

*Kino* is again reported scarce in this market and the price of lump has been advanced to \$2.50.

*Shellacs* are quite steady at 28c. to 28½c. for TN quality, 31c. to 32c. for DC and corresponding prices for other marks.

*Tragacanth* meets with steady moderate attention and previous prices are well maintained.

#### ROOTS.

*Aconite* continues jobbing at 8c. to 9c. for German.

*Ipecac* is in improved statistical position, but prices remain at the previous range of, say, \$1.80 to \$1.40. The demand does not raise above jobbing proportions.

*Jalap* has weakened materially in the interval in the face of urgent pressure to sell. Importers quote 11c. to 12c., but buyers' ideas are lower and bids of more than 9c. to 10c. are the exception.

*Sarsaparilla*, Mexican, is weak, with freer offerings and indifferent buyings. Round lots are offered at 5½c., though this price could probably be shaded upon a firm bid for a quantity lot. Ordinary jobbing parcels command about 5½c. to 5¾c.

*Gentian* continues in strong position, with nothing offering below 4¾c.

*Licorice* has sold fairly in the interval, and among other transactions we notice a sale of about a ton at 8c. to 10c.

#### SEEDS.

*Anise*, star, is firmer in consequence of reported light supplies in all markets. The lowest open quotation is now 22c. and most holders ask an advance, 25c. being named in a few instances. Italian Anise continues steady at 6½c. to 6¾c., with a fair demand experienced.

*Cardamoms* are held with increased firmness, in view of the steadily diminishing supplies here and in the foreign market. Decorticated are generally quoted at 85c.

*Celery* has sold fairly in the interval, some 25 bags changing hands recently at 12c., with 13c. generally asked.

*Hemp*, Russian, is not inquired for to any extent and values are easier, with ordinary size lots selling from store at 2¼c.

*Sabadilla* is quoted nominally at 25c., but an advance is anticipated in view of higher prices in the foreign market.



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## LEADING ARTICLES.

Professor Bailey of the University of Kansas makes a strong plea for the general adoption of the Metric system on page 179. The position of the military pharmacist in Sweden is set forth on the same page, in continuation of the series commenced last year.

The first of a series of articles on "The Pharmacy Laws of the United States," by Professor Beal of Scio, Ohio, is given on page 180. The scope of the papers is fully outlined.

A very useful note on "Dangerous Prescriptions" (page 181) will be a reminder to pharmacists of the danger of explosive compounds.

The present status of the pharmacist is sketched in a very interesting and scholarly article by Charles E. Parker on page 183.

A further contribution of papers on technical interest read at the Philadelphia College of Pharmacy will be found on page 184.

Professor Remington's able address on "Higher Education" is given in full on page 185-6.

The great "Chemical Laboratories of Germany" are described by Professor Prescott of Ann Arbor, in a paper which we reprint from a college quarterly on page 187 and following pages.

The strange practices of the Indian Doctors of South America are described on page 190-200.

## PURE FOOD PROSECUTIONS IN PENNSYLVANIA.

THE Pennsylvania Food and Dairy Commission has commenced inquiries into the manufacture of patent medicines and other articles which might be so made as to hoodwink the public. It is claimed by the Commissioners that some of the medicines advertised as remedies for all kinds of pain are nothing more than a concoction, to which there is very little real worth attached. A few days ago A. S. SEEBOLD, Deputy State Dairy and Food Commissioner, with headquarters in Philadelphia, purchased several bottles of so-called oil and malt extracts. These are the only two preparations that have as yet been secured, and it is the intention of the Commissioner to proceed with the matter and make a thorough investigation. The bill relative to this subject was passed and approved by the Legislature and Governor of Pennsylvania on June 26, 1895, and reads as follows:

SECTION 1. Be it enacted, etc., That no person shall, within this State, manufacture for sale, offer for sale or sell any article of food which is adulterated within the meaning of this act.

SEC. 2. The term "food," as used herein, shall include all articles used for food or drink by man, whether simple, mixed or compound.

SEC. 3. An article shall be deemed to be adulterated within the meaning of this act:

a. In the case of food: 1. If any substance or substances have been mixed with it so as to lower or depreciate or, injuriously affect its quality, strength or purity. 2. If any inferior or cheaper substance or substances have been substituted wholly or in part for it. 3. If any valuable or necessary constituent or ingredient has been wholly, or in part abstracted from it. 4. If it is an imitation of or is sold under the name of another article. 5. If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article, whether manufactured or not,—or in case of milk if it is the produce of a diseased animal. 6. If it is colored, coated, polished or powdered, whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is. 7. If it contains any added substance or ingredient which is poisonous or injurious to health; Provided, that the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles or ingredients of articles of food, if each and every package sold or offered, for sale be distinctly labeled as mixtures or compounds, and are not injurious to health.

SEC. 4. Every person manufacturing, offering or exposing for sale or delivering to a purchaser any article of food included in the provisions of this act shall furnish to any person interested or demanding the same, who shall apply to him for the purpose and shall tender him the value of the same, a sample sufficient, for the analysis of any such article of food which is in his possession.

SEC. 5. Whoever refuses to comply, upon demand, with the requirements of section four, and whoever violates any of the provisions of this act, shall be guilty of a misdemeanor, and upon conviction, shall be fined not exceeding one hundred nor less than fifty dollars, or imprisoned not exceeding ninety nor less than thirty days, or both, and any person found guilty of manufacturing, offering for sale or selling any adulterated article of food under the provisions of this act shall be adjudged to pay, in addition to the penalties herein provided for, all the necessary costs and expenses incurred in inspecting and analyzing such adulterated articles of which said person may have been found guilty of manufacturing, selling, or offering for sale; Provided, that all penalties and costs for the violation of the provisions of this act shall be paid to the Dairy and Food Commissioner, or his agent, and by him paid into the State Treasury, to be kept as a fund separate and apart for the use of the Department of Agriculture for the enforcement of this act, and to be drawn out upon warrant signed by the Secretary of Agriculture and the Auditor General.

SEC. 6. The agent of the Department of Agriculture known as the Dairy and Food Commissioner, shall be charged with the enforcement of all the provisions of this act, and shall have the same power to enforce the provisions of this act that is given him to enforce the provisions of the act by which he receives his appointment.

The action of the Pure Food Commissioners in looking after the sale of malt and other proprietary medicines, which they are of the opinion are not what they profess to be, has caused some agitation among druggists, and it is believed that before the matter ends considerable litigation will ensue. It is claimed by the Commissioners that the malt in many cases is nothing more than sweetened beer and that for this reason it does not produce the results that it is claimed it will give. All the drugs secured by the Commissioners were purchased outright from the retailers and were then submitted to the various chemists selected by the State Board. In this way definite results were obtained. In some instances it is said that the drugs purchased have been found all right, and whenever this is the case the druggist who has been notified not to sell these drugs is again told that he may do so. There is little fear expressed by those most interested, and it is thought that little will be gained by the manner in which the information is being secured.

If the manufacturers are made to suffer for their shortcomings the retailers will welcome the measure, but they fear the possibility of having to go through the same troubles which have been so recently undergone in Ohio.



## THE NEW LIQUOR TAX LAW.

THE RAINES Liquor Tax bill was signed by Governor MORTON on Monday of this week. Subdivision 8 of Section XI of the bill relates to the sale of liquor by licensed pharmacists. By the provisions of this law pharmacists are prohibited from selling whisky or other alcoholic stimulants of this character except upon the written prescription of a regularly licensed physician and the payment of a tax graded in accordance with the size of the city or village. It will be seen on reference to the text of this subdivision, which we print below in full, that the measure does not interfere with the sale of alcohol for medicinal, mechanical or chemical purposes. Following is the text:

## SECTION XI, SUBDIVISION 3, OF THE RAINES LIQUOR TAX LAW.

Upon the business of trafficking in liquors by a duly licensed pharmacist, which liquors can only be sold upon the written prescription of a regularly licensed physician, signed by such physician, which prescription shall state the date of the prescription, the name of the person for whom prescribed, and shall be preserved by the vendor, pasted in a book kept for that purpose, and be not once filled, and which liquors shall not be drunk on the premises where sold, or in any outbuilding, yard, booth or garden appertaining thereto, or connected therewith, there is assessed an excise tax to be paid by such duly licensed pharmacist, or the corporation, association or copartnership of which he is a member, engaged in such traffic, and for each such place where such traffic is carried on by such pharmacist, or by such corporation, association or copartnership of which he is a member, if the same be in a city having by the last State census a population of 1,500,000 or more, the sum of \$100; if in a city having by the said census a population of less than 1,500,000, but more than 500,000, the sum of \$75; if in a city having by said census a population of less than 500,000, but more than 50,000, the sum of \$50; if in a city or village having by said census a population of less than 50,000, but more than 10,000, the sum of \$30; if in a city or village having by said census a population of less than 10,000, but more than 5,000, the sum of \$20; if in a village having by said census a population of less than 5,000, but more than 1,200, the sum of \$15; if in any other place, the sum of \$10. Nothing, however, in this subdivision shall be construed as prohibiting the sale without prescription of alcohol to be used for medicinal, mechanical or chemical purposes.

Our readers in this State should bear in mind that the act goes into operation at once.

## PAY OF HOSPITAL APOTHECARIES.

THE taking over by the State of the County Insane Asylums has caused changes in the method of distributing drugs to the institutions affected. The city asylums for the Insane on Blackwell's Island, Ward's Island and Central Islip, respectively, now merged into the Manhattan State Hospital, were formerly supplied through the General Drug Department on the grounds of Bellevue Hospital, of which Dr. CHAS. RICE is the chemist and general superintendent. These institutions now procure their supplies of drugs and surgical instruments through the steward of the institution, who is the official purchasing agent. The apothecaries of the several institutions are not pleased at the change,

for it means to them a reduction of salary of from 20 to 30 per cent. Why the State authorities should have so poor an opinion of the value of apothecaries as to pay them less than the city, is one of the mysteries of State government which it is difficult to fathom. Of course no graduated pharmacist in a city like New York will consent to fill a position of the responsibility attaching to that of apothecary in institutions of this kind, at the inadequate rate of compensation set by the State authorities, and the board at Albany will doubtless see this for themselves in a short time. Country methods can seldom be applied to city work with any degree of success.

## PROSPECTS OF A FIGHT.

THE good citizens of Cincinnati are making a brave attempt to keep the name of that growing city before the rest of the country. We have been surfeited with accounts of the stand taken by the State authorities against druggists of Cincinnati who have been under suspicion of selling drugs not up to the pharmacopoeial standard, and now if all reports be true, New York wholesalers are going to have some of the fun themselves, though of a different kind. AMBROSE PARK, of JOHN D PARK SONS COMPANY, a Cincinnati firm of wholesale druggists who gained some notoriety a year or so ago through the efforts of the Proprietary Committee of the National Wholesale Druggists' Association to prevent the sale of supplies to them by members of the association, on the ground that the firm in question were persistent cutters, has been in New York during the past week with a view to testing the legality of the means employed by members of the National Wholesale Druggists' Association to withhold supplies from his firm, and the first move in the fight was taken last Saturday when orders for goods were sent under legal advice in registered letters to some 15 of the leading wholesale druggists here. A move of a similar kind was made in Cincinnati by this firm when repressive measures were taken against them by the National Wholesale Druggists' Association last year, but it resulted in failure, and it is questionable whether any different results will be obtained in New York. Retailers are awaiting developments with considerable expectancy, while wholesalers are engaged in a game of speculation and fingering the unwelcome orders with a dubiousness seldom experienced.

Mr. PARK was interviewed on his return to Cincinnati by our correspondent in that city, but he refused to make any statement, saying that the present condition of affairs did not warrant any expression of his views as to the probable outcome of the proceedings.

## APPRECIATIVE COMMENT.

## A Common Acknowledgement.

I cannot get along without the DRUGGIST.  
K. P. STOCKWELL.  
BETHEL, VT., December 10, 1895.

## The Best Published.

Let me say that your paper is the best drug paper published in New York or anywhere else. I would be lost without it; like it better every time it comes.  
A. A. LEFEVRE, Ph G.

LANCASTER, PA.

## Newsy and Instructive.

I find the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD a very newsy and instructive publication.  
E. P. MANVILLE.

WHITEHALL, N. Y., December 11, 1895.

## The Best Published.

I regard the AMERICAN DRUGGIST as the best pharmaceutical journal published. Although not a subscriber I have read almost every issue for some time, and have yet to find a fault. I now wish to subscribe.  
H. G. POSEY.

NEW ORLEANS, LA., January 9, 1896.

## A Useful Christmas Present.

As I feel like making myself a Christmas present I know of nothing that will be more useful and entertaining than your valuable journal for the year 1896. You will find inclosed Postal Order for \$1.50, to pay for a year's subscription.

T. E. HERRICK.

GROTON, N. Y., Christmas, 1895.

## Always Attracts Attention.

I take pleasure in stating that your publication is the first one of the many journals I take which always attracts my attention. Were I forced to give up any, the DRUGGIST AND RECORD would be the last I should part with.

H. W. ROSE, M.D.,

The Kennard, Manchester, N. H.  
November 30, 1895.

## From the "Great Divide."

We are here on the Western slope of the Rocky Mountains, near the apex of the "Great Continental Divide," but your Eastern publication, the A. D. & P. R., furnishes us with many "pointers" and items of interest applicable to our pharmacy labors.

E. W. FULLER.

MARBLE, GUNNISON COUNTY, COLO., January 6, 1896.

## May Count on Him.

I have been a reader of the various leading pharmaceutical journals at different times, and I have no hesitation in saying that to my mind the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD leads them all. You may count on me as a subscriber as long as I continue in the drug business.

S. C. HAYS Ph.G.

PAYSON, UTAH, January 20, 1896.

Written for the  
American Druggist and Pharmaceutical Record.

## THE ADOPTION OF THE METRIC SYSTEM IN THE UNITED STATES.

BY PROF. E. H. S. BAILEY,  
University of Kansas, Lawrence.

To any person who has considered the advantages of the metric system, argument in its favor seems out of place, for the many reasons for its adoption greatly outweigh the few reasons, mostly bugbears, why it cannot be adopted. Though I cannot perhaps advance a single new fact in this connection, yet, in common with those who know that this system of weights and measures "has got to come" in this country, I can fire a shot into the camp of the enemy. By the enemy, of course, is meant the large number of persons who think that the present system is good enough; that it will not pay to take the time from our busy lives to learn the new one; that what was good enough for our fathers is good enough for us; that endless complications in trade would result from the change; that, in fact, we are mere theorists who advocate any change. Theorists always precede the practical people and they usually establish the truth of the theory, which the practical people then utilize. The scientific men of this country will unite in commending the metric system, yet so far their voice is not strong enough to get the people to second their efforts.

### TIME WASTED IN LEARNING WEIGHTS AND MEASURES.

We, some of us, remember the hours we spent in school on the weights and measures of our present system; hours that we then thought might much better have been spent in play. Were we in our simplicity so far wrong in our judgment? What was the use of spending weeks on what should have taken only days to learn? We might then, in the future, put the old systems into our higher arithmetics, for reference in making computations, or as a matter of ancient history, but there would be little need of them for the practical student who had only the bread and butter problem to solve. We find it of interest to look up the system of weights and measures in use among the Israelites and among the ancient Romans, but no one cares to take the time to learn all these tables in the common schools. With the adoption of the metric system these terms will soon be known only in our literature; they will not be a part of our every-day life.

### THE DECIMAL SYSTEM OF CURRENCY.

All of us who have had experience with the system of money in use in England are loud in our denunciation of the terms farthings, pence, shillings and pounds, with such arbitrary factors as 4, 12 and 20. We say it is absurd and very difficult to use, and we point to our system of United States money, a metric system, and say, why do you not keep up with the times and adopt some system like ours? We tell the Englishman that nearly all the civilized countries have a metric or decimal money system and that he is behind the times in not adopting one. Would it not be consistent for us to say as little about the subject as possible, until we became consistent enough to go a step further and adopt the sys-

tem that has been tried and found so convenient by the people of the Continent of Europe? We talk about the conservatism of the English; are we, their descendants, not affected with the same malady?

I was talking not long ago with a gentleman who held an important position as an expert in a city in Great Britain, and he told me, without seeming to think it anything out of the way, that in his work he used the old systems of grains, ounces, pints and inches; and that, too, in the face of the fact that for the last 25 years the metric system has been in general use by all scientific men both in this country and abroad. That is conservatism for you! It is probable that he would not for a moment contend that the old system was better, but he became accustomed to this, and it was too much trouble to change to a more modern one, which was acknowledged as superior.

There is no danger that we shall be accused of imitating our English friends or of striving to be very English in our methods. In fact it is quite possible that this conservative nation may take steps in the direction of the adoption of the metric system before we do, and in that case if we ever fully adopt it, we shall really bring up the end of the procession of civilized nations.

### THE NEW TERMS AND THE OLD.

In Germany, France and Switzerland there was little difficulty in inaugurating a new system, and even our neighbor Mexico found a way to do it. The people will, to some extent, retain the old denominations. For instance, it is still the common practice to buy groceries by the pound, but that means 500 grams, a value quite near to the pound. In this case the pound has become a new unit and is adopted for convenience. In the same way, even in our own country, although we have had the decimal money system for so many years, yet the old terms "shilling" and "bit" are still in use. So in some parts of Germany the "groschen" is still a common term, but it means a 10-pfennig piece.

If all transactions, to be legal, are required to be made in the language of this system, it will not be long before people educate themselves up to it. As has been suggested, let the Government make the metric system mandatory after July 1, 1897, in the post offices, in the surveys, the mint and other departments, and a large force of officials will soon be familiar with it, and will, in a sense, act as teachers for the rest of the community.

### HOW TO TEACH THE SYSTEM.

If at some specified time, say January 1, 1900, the new system for all private transactions goes into effect, then we have ample time to educate the public before that day. The teachers in the public schools cannot do a better work or a more practical one than that of making all who come under their care familiar with the system. In order to do this they must themselves know the details of the system practically. To do this they must handle and see the meter rule, the kilogram weight and the liter measure. They must learn and teach to others practically the simple relation of these measures. The students will soon be much interested in proving, by means of some simple balances and measures, that a liter or 1000 cubic centimeters of water weighs a kilogram or 1000 grams, and in comparing other units.

### THE STATE GOVERNMENTS SHOULD HELP.

Each State might aid very materially in the introduction of the new system by sending out some correct and yet very cheap weights and measures. The cost would be small as compared with the practical good that would accrue. In most of the States no special machinery would be required to disseminate the material and the information, for it could be handled directly by the county superintendents or boards of education.

### THE WAY TO ADOPT IS TO ADOPT.

The metric system as now taught in the public schools, without any practical ocular demonstration, is of very questionable value. Students are all the time coming to our higher institutions of learning who "have studied the metric system," but who still think of buying cloth by the liter and sugar by the millimeter. The people of this country have not been practical enough in the treatment of this problem, as they were not thoroughly in earnest about it and do not see any use in learning a system that is not to be used, but let the added impulse come to them that they will be obliged to use the system in 1900, and there will be no difficulty in mastering it. As was said of the resumption of specie payment, "the only way to resume was to resume," so in this case the only way to adopt the system is to adopt it.

## PHARMACISTS IN THE ARMIES AND NAVIES OF THE LEADING EUROPEAN STATES.\*

### XII.

#### Sweden.

Military service is the same as in Norway and Switzerland. Only in the Military Hospital, in Stockholm, is there a special military pharmacy, which provides the troops of the garrison of Stockholm with medicines. The manager is a pharmacist employed by the government. The stock of drugs and chemicals is obtained from a civil pharmacy in Stockholm at wholesale prices.

The pharmacist of the Military Hospital has neither the rank of an officer, nor a uniform. He is assisted by the physicians, pharmacists and sanitary soldiers who are undergoing military exercises.

The pharmacists who are necessary in war are trained with the sanitary troops.

Fitness to enter the third class of a college is required for entering the profession. Three years of practical experience in a pharmacy, followed by an examination, and employment as clerk for two years, and subsequent study for two years at the University Institute in Stockholm, are required before a full pharmacist's license will be granted. The right to manage a pharmacy can then be acquired by passing the first examination.

\* Translated from the *Pharmaceutische Zeitung*, by Otto Hoffmann, A.B., under the direction of Dr. Geo. F. Payne, chairman of the Special Committee of the A. Ph. A. appointed at the Asheville meeting to work for the fuller recognition of pharmacists in the army and navy of the United States. The publication of the series was begun in this journal for September 10 and so far there have appeared descriptions of the position of the pharmacist in the German army (September 10), the German navy (September 25), the Austro-Hungarian service (October 10), the Italian service (October 25), the French service (November 25), the Russian service (December 10), the English service (December 25), the Swiss service (January 10), the Belgian service (January 25), the Dutch service (February 25) and the Norwegian service (March 10).

# A Synopsis of the Pharmacy Laws of the United States.

## A Summary of the Principal Provisions of the Various Laws Pertaining to the Practice of Pharmacy.

By J. H. BEAL,  
Scio, Ohio.

**T**HE object of the following papers is to present in a form convenient for reference, and free from legal verbiage, the principal features of the several pharmacy laws of the American Union, the provisions chiefly referred to being as follows: The dates of enactment and amendment of the laws and the extent to which they apply over the State. The constitution and selection of the examining boards, their revenues, powers, and compensation; the grades of licenses issued, the legal qualifications of licentiates, and the credit allowed for diplomas in medicine and pharmacy; and the fees for registration and renewal, provisions affecting adulterations, the labeling of poisons, etc.

*Unless otherwise expressly stated in the abstracts given it is to be understood:*

1. That each law applies territorially to the entire State which enacted it.
2. That the style of the examining board is simply Board of Pharmacy or State Board of Pharmacy.
3. That the number of years for which the members hold office is equal to the number of members on the board, i.e., if the board has five members the term of office is five years.
4. That the statutory titles of the licentiates are Registered Pharmacist and Registered Assistant, or Assistant Pharmacist.
5. That the certificates of other boards and diplomas of colleges of pharmacy and medicine are not recognized by the law.
6. That there is no statutory requirement of age and experience.
7. That no renewal of registration is required.
8. That the Pharmacy Act does not prohibit adulterations nor require the labeling of poisons.
9. In general that when the abstract does not mention any particular subject, it is because the pharmacy law is silent upon the point in question.
10. That certain provisions uniformly present in all the laws are omitted, such, for example, as the provision for the registration without examination of those engaged in pharmacy at the time of enactment of the law. Such provisions are of temporary and local interest only and would occupy space without imparting information.

In order to avoid needless repetition, the following general forms of poison and label laws are given, and are referred to by number under the States which have the same or similar provisions:

### General Form of Poison and Label Law.

#### FORM NO. 1.—Schedule A.

Arsenic, and its preparations, corrosive sublimate, white precipitate, red precipitate, red mercuric iodide, potassium cyanide, hydrocyanic acid, strychnine, and all other poisonous alkaloids, and their salts, essential oil of bitter almonds, opium and its preparations, excepting paregoric and other preparations of opium containing less than 2 grains to the ounce.

#### Schedule B.

Aconite, belladonna, colchicum, conium, nuxvomica, henbane, savin, ergot, cotton root, cantharides, crocote, digitalis, and their pharmaceutical preparations, croton oil, chloroform, chloral hydrate, zinc sulphate, mineral acids, carbolic acid and oxalic acid.

The articles contained in both schedules must be labeled, both on the container and on the outside wrapper, with the name of the article, the word "Poison," and the name and place of

business of the seller. Nor may any such article be delivered until it has been ascertained that the purchaser is aware of its poisonous character and desires it for a legitimate use. In addition to the preceding, when any article in Schedule A is sold an entry must be made in a book kept for the purpose, stating the date of the sale, the name and address of the purchaser, the name of the article, the purpose for which it is to be used, and the name of the dispenser. This record must be preserved for at least five years. The requirements as to labeling and recording do not apply to poisons dispensed on physicians' prescriptions, when not in unusual quantities or doses.

#### FORM NO. 2.

The same as No. 1, except that all named poisons are embraced in one schedule and that the recording of the circumstances of the sale is not necessary.

Variations from the above forms are noted under the laws in which they occur.

It should also be remembered that the synopsis purports only to give the provisions of the "Pharmacy Act" itself. The criminal code of the State may contain other laws affecting the practice of pharmacy, or the State Board may have rules fixing fees less than allowed by the statute, or requiring age and experience when the law does not. In only a few laws are such facts referred to.

Some of the laws are so loosely drafted as to leave the meaning of certain provisions in doubt. In such cases the writer has adopted that interpretation which seemed to him most probable.

In some instances the date of enactment could not be obtained, and in the case of a few others the dates given are open to doubt. The writer will be thankful for the correction of any errors which he may have made. The writer desires also to express his obligations to the Secretaries of various boards, for courtesies shown, and to Caswell A. Mayo, editor of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, for assistance in procuring copies of the laws and for revising the abstract of the laws of New York.

## Alabama.

Enacted 1887. The law applies only to towns having over 900 inhabitants, and within a radius of 2 miles of such towns.

The "Board of Pharmacy" consists of three members selected and appointed by the Governor. The sum of \$500 per year is devoted to the payment of expenses, but nothing is said as to salary of members. Any surplus revenue is divided equally between the State and the Alabama Pharmaceutical Association. The board fixes the time and place of its meetings. Only one grade of licentiate is recognized, styled Registered Pharmacist. Graduates of colleges of pharmacy which require four years' experience before granting a diploma, and qualified physicians, are registered without examination.

The fees are \$3 for registration by examination, and \$2 for registration on diploma.

The pharmacist is held responsible for the quality of goods dispensed, except for proprietary articles, and medicines in original packages. Wilful adulteration is punishable by fine and revocation of certificate.

The poison law corresponds to Form No. 2, with the addition to the list of veratrum.

Itinerant vendors of drugs or medicines, or persons publicly professing to cure disease, injury or deformity in any manner, are required to pay an annual tax of \$100.

All penalties are recovered in the name of the State.

## Arkansas.

Enacted 1888. The act applies only to incorporated towns and cities. The Arkansas State Board of Pharmacy consists of five members selected and appointed by the Governor. Their compensation is not fixed, nor are they required to account for the money received from fees. The board is required to hold not less than two meetings per year, one to be at the time and place of the annual meeting of the Arkansas Association of Pharmacists.

Only one grade of licentiate, styled Registered Pharmacist, is provided for.

Graduates of colleges which require three years' experience before granting a diploma are entitled to registration without examination.

The fee for examination and registration is \$6; for registration on diploma, \$3. Between sessions any member of the board may grant a temporary certificate, good until the next succeeding examination. The fee for such temporary certificate is \$2.

Unregistered persons may sell "grocers' drugs" and patent proprietary, or non-secret medicines.

Wilful adulteration or sale of adulterated goods is prohibited.

The labeling of poisons is not provided for by the pharmacy act.

The certificate of a registered pharmacist is revoked by conviction for the illegal sale of intoxicating liquors, or for intentional adulteration, and by retiring from the drug business for a period of 12 months.

Penalties recovered for violations of the act inure to the public school fund.

Registered pharmacists are exempt from jury duty.

## Arizona.

Has no pharmacy law.

**California.**

Enacted 1891. Amended 1898. The Board of Pharmacy consists of seven members, selected and appointed by the Governor for a term of four years. The terms of all expire at the same time, so that at the end of every four years the whole board is newly appointed. The members receive a per diem of \$5 and expenses, and the secretary such additional compensation as the board may provide. The board is required to meet at least quarterly.

Two grades of licentiate are recognized. Registered pharmacists must have four years' experience before registration. Assistant pharmacists must have two years' experience and be 18 years of age.

Graduates of legally constituted colleges of pharmacy who have had four years' experience are registered without examination. The wording of the law would seem to permit the registration without examination of persons who have had four years' experience, and "shall present satisfactory credentials or certificates of their attainments" to the board. The law distinguishes between "Graduates in Pharmacy" and "Licentiate in Pharmacy," using the latter term as a designation for one who is registered by examination.

The fee for registration is \$5 for pharmacists, and \$2 for assistants. An annual renewal fee of \$2 is required from pharmacists, and of \$1 from assistants.

"General dealers" may sell proprietary medicines and drugs in original packages. Wholesale dealers are excepted from the provisions of the act, except the section relating to the labeling of poisons.

The poison law corresponds to Form No. 1, with the following exceptions: Schedule A omits red and white precipitate, biniodide of mercury and essential oil of almonds, and includes cocaine. Schedule B includes the articles omitted from Schedule A, also phosphorus and sugar of lead, and omits henbane, ergot, cotton root and creosote. The provisions of this section do not apply if a single bottle or package does not contain more than an ordinary dose. Original packages of the scheduled articles must be labeled or branded poison, but when sold at wholesale the sale need not be recorded.

Intentional adulteration or sophistication is forbidden and punished by fine.

The pharmacist must file the original of every prescription filled at his store, and preserve the same for two years. When ordered by the prescribing physician a copy must be supplied.

Fines recovered for violation of the law are paid to the board of pharmacy.

Persons registered under the pharmacy act are exempt from jury duty.

**Colorado.**

Enacted 1887. Amended 1898. In towns of less than 500 inhabitants, where there is no licensed pharmacy, merchants may deal in drugs and chemicals under restrictions prescribed by the Board of Pharmacy. The State Board of Pharmacy consists of three members appointed by the Governor from nominees presented by the Colorado Pharmaceutical Association. The members hold their office for two years, and receive \$5 per day and expenses. The secretary receives a salary which shall not exceed \$500 per annum. The board is required to hold meetings every four months, at such times and places as it may determine.

Two grades of licentiate are provided for. Pharmacists must be 21 years of age and have four years' experience. Assistants must be 18 years of age and have two years' experience. Graduates of schools approved by the board are registered without examination, provided they have had four years' experience before obtaining their diplomas.

The registration fee is \$5, with an annual renewal fee of \$2, and is the same for both grades of licentiate.

Failure to renew in 30 days after notice from the board works a revocation of license.

General merchants may keep and sell "such poisons, acids and chemicals as are regularly used for mining, agriculture and the arts," provided they are kept and sold only for such purposes, and in sealed and plainly labeled packages. Wholesale dealers are also excepted from the provisions of the act.

The law gives the following list of poisons: "Aconite, belladonna, conium, henbane, nux vomica, opium, ergot, cantharides, digitalis and ipecacuanha and their preparations; alkaloids and other derivatives, morphine, strychnine, codeine, cocaine, and all other alkaloids, and their salts; chloral, chloroform, ether, oil tansy, oil pennyroyal and all other hypnotics, ecobolics and emmenagogue agents; mercury, copper, antimony, zinc, iron, lead, gold, arsenic and silver, their salts and compounds; all cyanides, iodides, bromides, all of which must have a "caution label," the form of which is to be prescribed by the Board of Pharmacy.

Any proprietary or other preparation containing any of the scheduled poisons must bear the same label. False statements as to the composition of such articles are punishable by fine.

Penalties collected for violation of the law are paid to the Board of Pharmacy. Annually the board is required to pay over all the money in its possession in excess of \$800 to the State Pharmaceutical Association, to be held by the latter as a fund for educational and scientific purposes.

Persons registered under the act and actively engaged in pharmacy are exempt from jury service.

**Connecticut.**

Enacted 1888. Amended (?). Three "Commissioners of Pharmacy" are appointed by the Governor from nominees presented by the Connecticut Pharmaceutical Association. The members receive a salary of \$800 per annum and expenses, provided the receipts from license fees are sufficient to cover said sums. If the amount received is not sufficient to pay the salaries, then the commissioners divide equally the amount received, and the expenses of stationery and printing are paid out of the State treasury. The board is required to hold five meetings annually.

The statutory title is "Licensed Pharmacist," and no second, or assistant's grade, is recognized.

The law permits registration without examination of holders of diplomas from "reputable colleges of pharmacy," and of licentiate from other States, but the board only recognizes New York City Board certificates.

The fee for examination and registration is \$5; for registration without examination, \$3, with an annual renewal fee of \$2.

Except when sold at wholesale, or for use in the manufacturers or the arts, or

on the prescription of a practicing physician, the following articles must be labeled poison: "Acid carboic, ammoniated mercury, acid muriatic, chloroform, acid nitric, tinct. aconite, acid sulphuric, tinct. belladonna, acid oxalic, tinct. digitalis, creosote, tinct. opium, extract belladonna, tinct. veratrum viride, sugar of lead, morphine, croton oil, nux vomica, cobalt, extract nux vomica, oil bitter almonds, opium oil tansy, cocculus indicus, aqua ammonia, red oxide mercury, gelsemium, paris green, rat dynamite, rough on rats; or any article like the three last named." For a violation of this section the dealer is liable to a fine of \$1. In the cases of arsenic, strychnine, corrosive sublimate, prussic acid and cyanide of potassium the label must contain, in addition to the word poison, the name of the seller and the date of sale; the name of the purchaser, the date of sale, and the quantity sold must be recorded.

Wilful adulteration or sale of adulterated drugs and medicines is prohibited. Wholesalers are excepted from the provisions of the act, except as to adulterations.

The board is empowered to revoke the license of persons convicted of violating the provisions of the pharmacy law.

Prosecutions may be had in police or city courts and before justices of the peace. Penalties recovered inure, one-half to the person prosecuting and one-half to the town where the offense was committed.

(To be continued.)

**Dangerous Prescriptions.**

In a recent number of the *Pharmaceutische Wochenschrift* appears a long and interesting article giving a number of dangerous prescriptions, a few of which are given in abstract below.

While the combination of potassium chlorate with organic bodies almost always results in explosive mixtures, the following combination has sometimes been ordered in tooth powders without this fact being borne in mind, as in the following:

I.	
Potassium chlorate.....	10 grams
Willow charcoal.....	10 grams
Powdered cinchona.....	10 grams
Oil of peppermint.....	4 drops

II.	
	Grams.
Potassium chlorate.....	2
Potassium by tartrate.....	2
Magnesium carbonate.....	2
Saccharine.....	1

III.	
	Grams.
Potassium chlorate.....	10
Sodium salicylate.....	10
Powdered cinchona.....	30
Powdered charcoal.....	30

In these formulas, and in others similar to them, the various ingredients are used partially on account of their cleansing and partially on account of their antiseptic, astringent or aromatic effect, without any thought being given to the question of whether one or the other constituent would render the tooth powder moist or would act upon some other constituent so as to make the powder explosive in its character. Any combination of potassium chlorate with salol, thymol, starch, sugar, saccharine, sodium benzoate, salicylic acid, sulphur, etc., such as is often ordered, is of course more or less prone to the production of an explosion with danger either to the patient or to the dispenser.

The combinations of potassium chlo-

rate with the nitrates, with iron salts and with calcium hypophosphite, etc., are also prone to decomposition, and one must also be careful about triturating potassium permanganate with oils, and of mixing it as it is sometimes ordered, with alcohol and glycerin. Other combinations which are sometimes thoughtlessly ordered are chromic acid, or bromine, with glycerin or alcohol, and of concentrated nitric acid with organic substances, and such combinations should, of course, be avoided.

Tincture of iodine when mixed with an equal quantity of ammonia produces the highly explosive ammonium nitrite, and all the iodine derivatives should be handled with caution in this respect.

If the physician wishes to use a caustic pencil containing one of these sub-

stances — iodoform, for instance — by ordering the combination of 5 gm. of iodoform, 2 mgm. of silver nitrate, and sufficient quantity of glycerin to form bacilli, he is subjecting the dispenser to the danger of serious injury from the nitric which will be set free and thrown out of the mixture by the formation of the iodine of silver which in forming generates very great heat.

As is well known, iodine must above all things not be brought into direct contact with the terebinthinate ethereal oils, since when this is done there is nearly always so great a development of heat that the entire mass is scattered all around. The violent reactions of iodine should always be borne in mind, and the greatest care taken whenever working with it in practice.

a moderately thick coating of paraffine on the tongue when the taste will very soon convince one of the solubility of the coating. Houck coats his pills in the following manner: He warms the pills in an evaporating dish to about 80 degrees C., adds the paraffine in small pieces, in the proportion of about 2 to 3 gm. to each 1,000 pills; he covers the dish with a similar dish and rotates the pills by moving the evaporating dish. If necessary, he repeats this operation, and finally throws the pills upon a marble plate to cool.

**The Treatment of Burns with Ichthyol.**—In burns of the second degree with the formation of bullæ, even when extensive areas are involved, ichthyol, according to Leistikon, acts in the most favorable manner. The manner of the application is important. The author has employed various forms, but has found especially useful powder, a soft paste, and a salve mull. The powder form is chiefly used in extensive burns of the first degree, and should be plentifully applied. In extensive burns of the second degree the soft paste is preferable; and when the inflammatory symptoms are severe its use may be combined advantageously with that of the powder. As a powder the author recommends the following:

	Parts.
Zinc oxid.....	20
Magnes. carb.....	10
Ichthyol.....	1 to 2

As a paste he employs the following:

	Parts.
Calc. carbonat.....	10
Zinc oxid.....	5
Ol.....	10
Aq. calcis.....	10
Ichthyol.....	1 to 8

**Improved Process for Griffith's Mixture.**—W. Johnson communicates the following improved process for the preparation of compound iron mixture to the *Pharmaceutical Journal*. He says: "Dissolve the sugar with the iron sulphate instead of mixing it with the myrrh and potassium carbonate. This seems a very little trifle to take notice of, and yet it is surprising what a difference 'little trifles' sometimes make. Dear old Redwood used to tell us that sugar was unfriendly to emulsions, and, acting on that hint, the writer tried a little departure from the letter of the law, on the lines above named. The result justified the experiment. The emulsion of myrrh, pot. carb. and rose water was more easily formed and more milky without the sugar; and not a little irritation in future was saved. To get a really good emulsion, the myrrh (nice, oily pieces) should be rubbed hard with the alkali till it becomes not only pulverulent but pasty, before adding any rose water. When that is done, the emulsion can (when diluted) be safely strained through coarse muslin, to remove bits of bark, etc. If not too late, the *Pharmacopœia* revisers might take note of this."

**Synthetic Glycerides.**—It is well known that hitherto cerotic and melissic acids, both characteristic constituents of beeswax, have only been found in nature either in the free state or in combination with monatomic solid alcohols, while the fatty acids are in general found combined with the liquid triatomic alcohol glycerin. Marie has now applied the method used successfully by Berthelot in the production of synthetic glycerides, and has succeeded (*Journ. de Pharm. et de Chem.*) in synthesizing a series of glycerides of these acids. The



**A Modification of Mohler's Test for Tartaric Acid.**—Denigès (*Jour. de Pharm.*) gives the following modification of Mohler's test for tartaric acid. A solution of pure resorcinol (2 gm.) in dilute H<sub>2</sub>SO<sub>4</sub> (1 per cent.) is added to about 20 times its volume of strong sulphuric acid, and one or two drops of the liquid to be tested is added to the mixture. If tartaric acid be present the mixture, when warmed to 115 to 140 degrees, develops a characteristic violet-red color.

**Reactions for Opium Alkaloids.**—Bruylants (*Bull. Soc. Chim.*) gives the following reactions for morphine and other opium alkaloids. The alkaloid is dissolved in concentrated H<sub>2</sub>SO<sub>4</sub>; and 1 drop of the cold solution is added to a drop of ammonium molybdate solution (1 per cent.); a violet color results; if the morphine solution is first treated on a water bath, a green color results. Both colors are changed to orange by addition of a crystal of potassium nitrate.

**Fat and Ash of Nutmeg.**—Busse (*Zeit. Anal. Chem.*) states that the total ash of nutmeg should not exceed 5 per cent. nor the amount of ash insoluble in HCl 0.5 per cent. To estimate the fat 2 gm. of the grated nutmeg are extracted with ether for eight hours, dried, rubbed down with fine sand, and again extracted for four hours. After evaporating the ether the fat is absorbed by 8 gm. of ignited sand and dried at 100 degrees for five hours. The amount varies from 30 to 40 per cent.

**Carbolic Acid in Surgery.**—Dr. Oscar H. Allis of Philadelphia points out, in a recent paper, that while toxic effects may and often do follow the use of dilute solutions of carbolic acid by topical applications or for purposes of irrigation, the deliquescent acid could be used without deleterious effects and with especially

good effects if applied to fresh wounds and to burns. The weak solution is readily absorbed and thus exerts its toxic effects, while the strong acid coagulates the albumin of the tissues, renders the nerves anæsthetic, and closes tightly the blood vessels and lymphatics.

**Influence of Ether, Alcohol and Chloroform on Pepsin.**—This subject has been studied by W. Lauren, who finds (*Chem. Zeit.*) that ether, chloroform and alcohol are under no circumstances capable of accelerating the digestion of albumen by pepsin, and, on the contrary, that small quantities have a decidedly inhibitory effect upon pepsin, even when present in the portion of one-half of 1 per cent. of ether or 2 per cent. of alcohol, or one-hundredth of 1 per cent. of chloroform are added at temperatures below that of the ordinary body temperature.

**Fluorides of Acids.**—M. Meslans and F. Girardet state that the fluorides of acids are very easily obtained, and with yields nearly theoretical in quantity, by the action of the chlorides of acids upon zinc fluoride. These substances rapidly attack glass in presence of traces of water. In presence of this latter body they display a greater stability than the chlorides; they do not fume in the air; they react slowly with the alcohols to form ethers, and rapidly with ammonia to form the corresponding amides.—*British and Colonial Druggist.*

**Paraffine Coating for Pills.**—Since the usual method pursued in coating pills with paraffine is by dipping them in the melted substance at a temperature very much above that of the body pills so coated are said to be apt to pass through the intestinal canal without being dissolved. Houck, however, states that this danger is more imaginary than real, as can be determined by placing a pill with



imperfect knowledge we still possess of the constituents of beeswax necessarily renders any work on them of the highest importance and interest. The following glycerides of cerotic acid were prepared:

Monocerotin. —  $C_{21}H_{42}(OH)(C_{21}H_{41}O_2)$  or  $C_{21}H_{42}(OH)(C_{21}H_{41}O_2)$  in crystals, melting at 79 degrees.

Dicerotin. —  $C_{21}H_{42}(OH)(C_{21}H_{41}O_2)_2$  or  $C_{21}H_{42}(OH)(C_{21}H_{41}O_2)_2$ , melting at 79.5.

Tricerotin. —  $C_{21}H_{42}(C_{21}H_{41}O_2)_3$  or  $C_{21}H_{42}(C_{21}H_{41}O_2)_3$ , in crystals, melting at 76.5 degrees.

The three corresponding melissins were also prepared of the formulæ  $C_{21}H_{42}(OH)(C_{21}H_{41}O_2)_2$ , melting at 92 degrees;  $C_{21}H_{42}(OH)(C_{21}H_{41}O_2)_3$ , melting at 93 degrees; and  $C_{21}H_{42}(C_{21}H_{41}O_2)_3$ , melting at 89 degrees.

### Some Aspects of Technical Pharmacy.\*

BY CHARLES E. PARKER,  
East Orange, N. J.

"Among the druggists in the United States, who in number amount to some thousands, there are individuals of every grade of qualifications; some educated chemists, many men of moderate attainments in science, and more whose knowledge is chiefly confined to the art of making money."

This classification of American pharmacists of 40 odd years ago is the introduction to a series of essays by Prof. Edward Parrish, reciting the knowledge of exact science required in pharmacy, and the professional nature of the duties and responsibilities pertaining to the business, and pointing out the need of more complete organization as a means of combating the then prevailing evils, namely, "The undue reduction of prices, the sale of quack medicines in place of standard preparations of our own manufacture, and the failure to secure from physicians a due regard to the rights and immunities of apothecaries."

#### TWO SIDES TO THE PRACTICE OF PHARMACY.

The practice of pharmacy, as a department of applied science intimately associated with the public health, has two essential sides—the commercial and the professional. The commercial side has for its function the maintenance and increase of the material prosperity of the business as in other mercantile pursuits. The professional side is, theoretically, charged with most weighty and honorable responsibility for service to the public.

Notwithstanding the systems of fees and honorariums associated with professional services, it is a time-honored view, which still commands approbation, that such services are not of the nature of a mere commodity, and their value can not be adequately expressed in a money equivalent. The pharmacist, however, receives no direct recompense for his professional services, and therefore, justly, claims from the public some commercial privileges. On this fact, and on the propriety of protecting the public against unskilled and incompetent pharmacists, is based the enactment of our numerous pharmacy laws, which it must be admitted owe their existence to the influence of the pharmacists themselves, and to the indifference rather than the interest of the general public. They have yet to be tried in the forum of public opinion, and there is still a reasonable doubt how

the "dear people" will appreciate the solicitous efforts of the pharmacists in their behalf and whether they will not condemn them with attempts at offensive class legislation, now so common and indefensible.

The following quotation is from a New York newspaper:

#### A STATE BOARD OF UNDERTAKERS.

The Legislature established what was virtually a State Board of Chiropractors last year, by the passage of a silly act to incorporate the Podic Society of the State of New York. It is now asked to establish a State Board of Undertakers. As no person can enter upon the "practice of chiropody" in the future without the license of the Podic Society, so it is proposed that no person shall hereafter engage in the "practice of undertaking" without a license from the Board of Undertaking Examiners of the State of New York.

The desires of a private corporation or voluntary association, however (such as the New York State Undertakers' Association) should not induce the State to assume a supervision of the business of undertakers. We have yet to hear of any evils in their occupation which demand so stringent a remedy as the State intervention contemplated by this proposed law. On the other hand, there are serious objections of public policy to the constant increase in the number of State officers and official organizations. We have too many State boards in New York already. The various professions and pursuits over which they have jurisdiction are being regulated to death. Legislation of this sort is making life burdensome by the complexity of the innumerable rules which are prescribed to control and limit human action, not in respect to matters of real importance, but in regard to the pettiest details of existence.

Instead of establishing a State Board of Undertakers the Legislature had better constitute itself into a State board to bury bad bills.

In this connection it may be noted that organizations representing the opticians and the horseshoers have applied for similar legislation to regulate their occupations.

A drug paper says: "A raking fire is still kept up by the daily press of Wisconsin against that provision of the new pharmacy law which restricts the sale of all medicines to registered pharmacists."

An Oshkosh paper has this to say:

The sale of Pond's Extract, Rough on Rats, vaseline, listerine or Hood's Sarsaparilla is a simple business transaction, requiring absolutely no medical or scientific knowledge or training whatever. But in order to confine the business to a few, and keep the prices up, the druggists slyly procure the passage of a law making it a penal offence to sell such goods anywhere but in a drug store. Suppose the boot and shoe men should get the Legislature to pass a law prohibiting the sale of boots and shoes except in stores where the proprietor had served an apprenticeship as a cobbler! Or how would it do if the grocers should combine and secure the passage of a law shutting out the sale of groceries from all stores except those owned by men who had served seven years driving a grocery wagon. A law confining the sale of dry goods to those stores which were owned by men who could tell linen from cotton in the dark would be just as sensible. All such legislation is unjust and absurd, because it is designed to promote monopoly to favor a certain class and to cheat the public.

#### MONEYED INTERESTS INVOLVED.

There are not wanting large advertising interests and moneyed enterprises, nourished and built up by the mistaken complaisance of pharmacists themselves, which are interested in procuring a popular verdict of the above character. So great is the prejudice against class legislation that until a general understanding of the public utility of professional pharmacy laws obtains it will be difficult to effectually enforce them without arousing a dangerous antagonism.

Pharmacy is in a formative condition, and in the future may have more to ask in the way of legal protection than it has had in the past.

The modern pharmacist succeeds to all the responsibilities and obligations of the ancient apothecary without opposition, but his utmost efforts have not

preserved to him his inheritance of former privileges and emoluments. In some countries, where legal restriction of competition confers a limited monopoly on existing pharmacists, the situation, both commercial and professional, is no doubt better. But here, where the only limitation is incompetency (or lack of capital), a stern commercial rivalry is routing all our traditions.

A prominent drug man is quoted as saying: "There can be no question but that the drug trade is passing through an evolution, and that there is a readjustment in process which, according to present appearances, will end in the survival of the fittest, and this means a very material reduction in the present number of retail distributors of drugs and medicines."

As the general dealers have more and more encroached upon the retail druggists, by putting in their stock medicines which are sold at cost, the druggist has been forced more and more to add to his stock goods that were formerly carried by department stores only. Thus we find that in the large cities what were formerly drug stores have to some extent become general stores, and this change we believe will go on; while on the other hand a limited number of pharmacies will be established in each city confining themselves entirely and exclusively to pharmaceuticals and chemicals.

The nostrum trade, like vice—

"A monster of so frightful mien  
As to be hated needs but to be seen;  
Yet seen too oft, familiar with her face,  
We first endure, then pity, then embrace."

—has inflated the volume of the drug business and multiplied the number of dispensers, and now threatens to leave them to inevitable collapse. But that would not be the collapse of pharmacy.

#### EXPANSION OF PHARMACEUTICAL EDUCATION.

Though commercial evils have done more in the last decade to bring about organization than professional enthusiasm in all the preceding years, there is abundant proof that professional standing, with technical skill at its command, is recognized as a leading element in the pharmacist's success. Witness the magnificent expansion of pharmaceutical education in this country both in means and application of instruction! The scientific attainments of the average druggist must be far greater than they were in Parrish's time, and constantly improving as the proportion of educated pharmacists increases. Why, then, do we not see a corresponding improvement in professional standing? Why does it not receive popular recognition?

#### THE DISPENSING PHARMACIST.

Technical skill is of no use to the professional side of pharmacy unless it is used, and used for the public welfare as well as that of its possessor. The dispenser is the typical pharmacist. But where in former years his sphere included many activities and much manipulative expertness in the preparation of drugs, and even the production of many of them, the modern tendency is for him to become a mere compounder and dispenser. Of course he is expected to know how, but actually is seldom required to perform the operations once a matter of constant routine. Step by step the productive processes of his little laboratory have been transferred to the works of large manufacturers. Year by year the pharmaceutical improvements and useful

\*Read at the meeting of the Kings County Pharmaceutical Society and printed through the courtesy of the society.

inventions which would once have conferred reputation and profit upon the dispensing pharmacies where they originated, have found a better market through these same manufacturers.

It is true that some pharmacists have successfully resisted this tendency, greatly to their credit, and, it is to be hoped, to the prosperity of their business. That the pharmacist can make most of his own preparations is admitted, and some very trustworthy writers figure out a profit in it; but the fact remains that the average one does not do it, and probably will not. The most obvious conclusion is that he thinks he can spend his time to better advantage.

In addition, it is to be considered that some of the requisites of modern pharmacy are of a nature involving the use of expensive machinery and large plant, which places their production quite beyond the reach of the pharmacy.

#### THE LARGE MANUFACTURER.

We have become too familiar with the competitive success of consolidated systematic effort to regard this development of manufacturing pharmacy as anomalous or unnatural. It is to be expected that it will draw to itself capital, business ability and technical skill, and as its tendency is not hostile to the public welfare the futility of direct opposition to it is apparent. The remedy, if there be one, must be of the *similia similibus curantur* order, otherwise we shall continue to see the manufacturing laboratories the main theater of pharmaceutical research and technical advance and the field of the dispensing pharmacist gradually yielding to the interests which encroach upon it.

#### DIVISION INTO CLASSES.

Again, among the pharmacies themselves, especially in cities, there are indications of a plane of cleavage. Business competition is sharp, and we hear rumors of many pharmacies being owned or controlled by wholesale houses or others whose interests are purely commercial. Such circumstances favor the total extinction of professionalism. In a similar way the owners of certain proprietary articles in England are endeavoring to protect retailers against the cutters on the theory that the retailers are *their agents*. Is it strange that people judge such pharmacists on a commercial basis?

On the other hand, it is in the city that the highest type of the modern pharmacy is developed, where no nostrums are sold, where their preparations are largely home-made, where the manufacturing laboratory is well appointed and where the skill of the pathologist and research analyst is at the service of the public. Here, where the dispenser has at command all the resources of technical experience, professional pharmacy may find its opportunity.

But there is not food for many big fish in the pharmaceutical pond, and if the little fish would not be swallowed they must seek shallow water or organize defence. An association of druggists in the West has engaged in a manufacturing enterprise with the expectation of accomplishing in combination what they could not do as individuals. This is encouraging. A successful effort of this sort will form a nucleus which will attract ability and skill, and pay more than money dividends to those who participate. The actual ownership and direction of its policy, as well as the distribution of its products, must react

very favorably upon the standing of the individual pharmacist.

#### RESEARCH SHOULD BE ENCOURAGED.

Another possible field for combined enterprise is that of research and analysis, which may well be associated with manufacturing as is often the case now with private enterprises. We hear it suggested that what pharmacy needs is less essay writing and more research. This may be very desirable for the dispenser, but it is useless to expect him to do much research worthy of the name under present circumstances. Amateur efforts score few real hits nowadays. Success is generally the result of systematic concentrated effort on the part of those who are qualified by skill and experience. Research is, in fact, a specialty and largely the province of experts. Unless pharmacists, through organization, promote this work at the hands of specialists, and take it under their collective control and patronage, the work will continue to be done, with few exceptions, by the schools and by manufacturing concerns of purely commercial character.

The Research Laboratory of the Pharmaceutical Society of Great Britain is a very creditable and successful undertaking of this sort.

As to analytical and other technical work necessary to assure the identity, purity and strength of drugs, it is not impossible that pharmacists may in self defence be compelled to adopt some collective plan for discharging a duty which is so difficult of individual performance. To anticipate and voluntarily meet this necessity would be far more progressive and professional.

#### DUTIES OF THE PHARMACIST.

We are familiar with the stock arguments why the druggist is entitled to the exclusive sale of powerful drugs—how his technical skill enables him to know their quality and professional honor binds him in his transactions to consider the welfare of the purchaser before his own profits. Suppose the public bought the average pharmacist at his own price, confirming to him the legal protection and more than mere commercial profit he claims (and has to a considerable extent received), and exacting, on the other hand, a full discharge of all those duties to the public on which his privileges are based. How many pharmacists are able to truly vouch for the drugs they dispense? How many make any more elaborate test than looking at them, or base their judgment on anything but appearance? Suppose all our American pharmacies were to-morrow submitted to such an official inspection of their stock and appointments as is customary in Germany, or suppose their transactions were tested by the food and drug inspection of England. With how large a share of public confidence would American pharmacy emerge from the ordeal?

#### THE RESULT IN OHIO.

Recent events in Ohio, perhaps, foreshadow the answer to these questions. The numerous convictions of pharmacists for violation of the food and drug laws have provoked much bitterness and resentment. Pharmacy as a profession has been measurably humiliated and discredited before the people, and its influence in Ohio has received an apparent setback. It is recognized that pharmacists as guardians of the purity and genuineness of drugs (and if they will

assume the duty, of foods also) cannot become apologists for adulteration, and in the long run pharmacy in Ohio will be all the better for this reverse. It is a potential victory. But how much better it would have been if by organized collective buying and expert examination in the laboratories of their societies, these pharmacists could not only have met the trial with success, but actively supported and promoted the pure food and drug movement. That is their natural prerogative, but if they will not exercise it it may be withdrawn. The advantage of an aggressive and progressive spirit in this matter is obvious. If organization has become sufficiently cohesive to do effectual work here is a field for its labors.

But the collective promotion of technical pharmacy will not restore public confidence in pharmacy as a profession unless public duty is construed in a liberal sense and steadily kept in view. With the individual, a large sense of his responsibilities and a conscientious discharge of them may sometimes lose him sales, but in the long run will inure to his advantage. To direct the energies of a co-operative laboratory exclusively to the ends of private gain would be to defeat its best prospects. The benefit would be far reaching if, as far as possible, all the interests of public health as well as all the technical affairs of pharmacy should there find consideration and furtherance.

#### Papers Read at the Philadelphia College.

The sixth regular pharmaceutical meeting of the Philadelphia College of Pharmacy was held in the museum of the college, on March 17. E. M. Boring presided. The first paper, entitled "A Proximate Analysis of Polygala Senega," was read by J. Henry Schroeder. Professor Trimble remarked upon the proportion of albuminoid matter, stating that 20 per cent. is rather a large amount to find in roots, and that it is probably stored as reserve material. Professor Lowe also thought this to be the case, as the drug contains neither starch nor inulin. Lyman F. Kebler read the next paper, which was entitled "Laboratory Notes," and under this head he included results of experiments with oil of cassia, elm bark, ipecac root, potassium iodide, reduced iron and saffron. These experiments were mostly for the purpose of detecting impurities and adulterations. Mr. Kebler found that benzene extracted the coloring matter from air-dry saffron, which contains about 14 per cent. of moisture, more readily than it did from the drug previously deprived of moisture.

Professor Trimble did not think that the amount of moisture in the air-dry drug would interfere with the action of the benzene, and that the failure to dissolve the coloring matter in the latter instance was probably due to a change caused during the process of drying.

Wallace Procter spoke of a spongy gray iron which was formerly much used, and which was quite pure in most respects, except a slight contamination of sulphide. Professor Remington said that this product was manufactured by L. Martin & Co. of New York, and that the presence of a small percentage of sulphide was owing to insufficient washing of the ferrous carbonate used in its manufacture. The sulphide was changed into hydrogen sulphide when

brought into contact with the liquids of the stomach, causing unpleasant eructations.

#### PROFESSOR REMINGTON ON THE OHIO PURE FOOD LAW.

Professor Remington also referred to the difficulties which the Ohio Food and Dairy Commissioners have gotten into on account of the stand they have taken in regard to the pharmacopoeial requirements, or to the construction which they have put upon the food laws of the State. He said the important question to be considered was the kind and amount of impurity, and whether it would interfere with the physiological action of the drug containing it, and mentioned in this connection the needlessly high standard of the tests for the alkaloidal salts of cinchona, the unnecessary expenses incurred in removing the last 1 or 2 per cent. of moisture from ether, and the presence of potassium carbonate in potassium iodide, which is an advantage rather than an objection.

#### BOTANICAL NOTES.

Professor Lowe read a paper entitled "Botanical Notes." His paper was accompanied by specimens of Japan and Indian aconite roots, stems of *Magnolia glauca*, the leaf scars and axillary buds together forming a striking resemblance to the human face in miniature; roots of *Apocynum androsaemifolium*, and *Apocynum cannabinum*, and a dried specimen of *Anthemis nobilis*, which was peculiar in that a number of the stems had grown together, forming one large stem.

#### ECONOMIC USES OF OPUNTIA VULGARIS.

Miss Bertha L. De Graffe read an interesting paper on "Opuntia Vulgaris." The economical uses of the plant were considered, it being grown in the South for hedges, and also used for feeding cattle. The juice of the fruit, which is a beautiful purplish-red color, is used for coloring wine. Accompanying the paper were specimens of the plant and fruit and photographs of the same, and also a sample of an aqueous extract of the coloring substance. It was stated that ammonia changes the color, and could probably be used for detecting this substance in wine.

#### NEUTRAL BASHAM'S MIXTURE.

Mr. Boring wished to know what is understood by a neutral Basham's mixture. F. W. Hausmann said that this was a prescription of a certain physician who wishes the acetic acid omitted from the preparation, and also that he desires four times the iron strength of the official preparation.

#### NEW SPECIMENS.

Professor Trimble called attention to the following named specimens: Liquorice seeds, which were purchased in New York City for 20 cents per ounce and were intended for planting; two samples of kino, which were presented by Baron Ferd. von Mueller of Melbourne, Australia, and were from *Eucalyptus regnans* and *Eucalyptus globulus* respectively; two samples of tungsten ore, known as schielite and wolframite (presented by Mr. Bullock); a sample of an Egyptian sugar from vacuum pan and centrifugal, polarizing 99 per cent., one of a Mexican sugar which resembles maple sugar, and one which came from Guadeloupe.

#### A FILTER FOLDER AND OBJECTIONABLE ADVERTISING.

Professor Remington presented, on behalf of Chas. Bullock, a filter folder

which was of French manufacture, and was introduced into this country about 35 years ago. It seems to have no other value than that of a museum specimen. Professor Trimble read a "Note on Distilled Water," by Prof. J. U. Lloyd, referring to some statements made in a former paper on this subject. Professor Ryan considered it important to direct the attention of druggists to a kind of advertising which might cause a reflection on themselves. Some wholesale firms put up packages of compressed herbs and inclose with the packages pamphlets which are extremely objectionable.

#### Higher Education for Pharmacists.\*

BY PROF. JOSEPH P. REMINGTON,

Philadelphia, Pa.

The American Medical Association has a deep interest in the education of the pharmacist. With improved methods and extended courses in the great medical schools, with the practices of medicine and pharmacy ever widening and developing, it must follow that better education for the pharmacist and more of it is imperatively demanded.

The first organized effort in America to instruct those who had entered the drug business resulted in the establishment of the Philadelphia College of Pharmacy in 1821. Since then colleges have been established in New York, Baltimore, Boston, Brooklyn, Buffalo, San Francisco, Chicago, Cincinnati, Cleveland, Kansas City, Louisville, Toronto, Montreal, Washington, Pittsburg, St. Louis, Iowa City, St. Paul, Lawrence (Kan.), Ann Arbor (Mich.), Madison (Wis.), Atlanta, Albany, Newark, Columbus, Ada (Ohio), Lebanon (Ohio), Lafayette (Ind.), Richmond, Scio (Ohio), New Orleans, Nashville and Detroit. The first years of all of these institutions were struggles for existence; the difficulties which were encountered were serious, and if it had not been for a little band of faithful, self-sacrificing friends of education, the efforts would have died from lack of appreciation. In looking back to these early days and in considering the educational work of the present, one remarkable fact stands out so prominently that it cannot be overlooked—the elevation of pharmacy has been due almost entirely to the unaided efforts of pharmacists themselves, for the desire for self-improvement has been the motive which gave life in the early struggles and which to day successfully supports the work.

#### NO ENDOWMENTS FOR PHARMACY.

Seventy-five years ago all that was deemed necessary to qualify one to practice pharmacy was a certain number of years' apprenticeship to the owner of a shop who had acquired his knowledge as he best could, by picking it up from an older person and from the few books which were then accessible. It is a surprising fact that not a single college has ever been endowed, and up to the present time practically nothing in the way of bequests from philanthropic friends of education has been received for these colleges. They are supported almost entirely by the fees of the students, and none of these students are compelled to enter

the colleges to acquire an education, but attend solely because they realize the value of systematic technical knowledge in aiding them in the practice of their profession. Millions of dollars have been poured into the coffers of the great universities and medical schools to carry on their work, by public spirited citizens, and State aid is often secured for them; but while every one must recognize that general education is of the highest importance in developing our race, it is an astounding fact that pharmacy, which every one admits demands education of a special character and of a high order, has been left without any material assistance from public spirited citizens outside of the profession itself; and this in the face of the evident proposition that this special education is primarily for the security of the public and the saving of human life.

#### DIFFERENCE BETWEEN THE LAWS REGULATING THE PRACTICE OF MEDICINE AND PHARMACY.

The public mind is filled with horror and the editorial ink of the newspapers of the land is lavishly spent, when an unfortunate error in compounding a prescription sacrifices a life. But in the writer's knowledge never once has the editor of a public paper advocated the endowment of institutions of learning for the education of those members of the community into whose hands the safety of the lives of the public is committed. At the present time the buildings, property and equipment of the forty educational institutions for teaching pharmacy amount to several million dollars, and the credit for establishing and carrying forward this work must be given to whom it belongs, "the pharmacists themselves."

Of late years, pharmacy laws have been passed in nearly every State in the Union, but these laws differ in one essential particular from those which guard the practice of medicine. In the latter case the State board of medicine compels the candidate to show evidence that he has been systematically educated in a medical college, by requiring him to produce a diploma, and then forcing him to pass an examination before a State board, but no pharmacy law has ever been passed in this country which compels a pharmacist to be a graduate of a college of pharmacy, before passing an examination. The pharmacist is permitted to practice and conduct a drug store, if he passes successfully a State board examination. In some of the States these examinations are of a most trivial and imperfect character, and this condition of affairs has resulted in giving a legal standing to a large majority of those practicing pharmacy to-day, who have never been systematically educated at a college or university, and many of those who once secure their license to practice from the State board, stop there and never take the time, nor undergo the expense of obtaining a college diploma; in other words, "they get as little as the law allows." But notwithstanding these adverse circumstances, the colleges of pharmacy are crowded and the facilities of many taxed to the utmost to give their students as thorough an education as is possible, thus proving that the better class acquire knowledge solely for its recognized value.

#### THE NECESSITY FOR SYSTEMATIC INSTRUCTION.

When the colleges in their early days were hampered by lack of means and by

\* Read in the Section on Materia Medica and Pharmacy, at the Forty-sixth Annual Meeting of the American Medical Association, at Baltimore, Md., May 7-10, 1895.

the struggle for existence, many of the apprentices were encouraged by their preceptors to stay away from the colleges, because of the argument that the preceptor could teach them more pharmacy behind the counter than the college professor could from the lecture table; but this idea, although still prevalent in some localities, has largely given way since the colleges have proved their "reason for being" through the results which have been accomplished, and the student himself now feels that he can acquire a better knowledge of the underlying principles of his profession by availing himself of systematic instruction in the colleges, and moreover by supplementing this by drug store experience. The immense additions to the materia medica and the enormous exploiting of new remedies have largely added to this condition, and we thus have an explanation of the general prosperity of these institutions. But there has also come with this a deeper sense of responsibility on the part of the colleges and a sure determination to broaden and strengthen the foundation and to add to the superstructure, while at the same time demolishing that which has become superannuated or has outlived its usefulness.

#### THE PHARMACIST'S EDUCATION.

In the demand for higher education it must ever be recognized that thoroughness in the essentials must never be sacrificed, and hence better methods for grounding the student in the underlying principles of every day practice have the first care. Renewed attention is continually directed toward preliminary education. The key to this subject is unquestionably found at the very beginning. The practice of pharmacy fortunately permits the acquiring of pharmaceutical knowledge during the novitiate of the student; the student of pharmacy has a great advantage in being able to labor at his profession, not only between the college courses, but while in actual attendance upon the lectures, and much instruction can be obtained from an intelligent and willing preceptor; and although the college may afford all of the facilities at its disposal, the daily and hourly contact with the preceptor exercises an influence for life upon the plastic mind of the tyro. The importance of only engaging such assistants as have already shown that they possess a good English education, is of the utmost value. While it is true that we may have embryo Elihu Burritts still in existence, they must ever prove the exception, and the preceptor who stamps his own individuality upon his assistants must see to it that the material which he is to mold and fashion should be suitably prepared to receive the instruction. If this be not done, the student entering college and mingling with his fellows is seriously handicapped, if not absolutely discouraged, by the difficulty of beginning a work late in life which should have been completed before entering a pharmacy.

#### THE PHARMACIST AND THE PHYSICIAN.

The pharmacist must ever be the intelligent coadjutor of the physician, and yet it is recognized that preliminary education is the burning question in our medical schools, and is even of greater importance in this connection. In the higher education of the colleges of pharmacy laboratory instruction plays an important part, and it is in this direction that the future looks most promising. It is not intended by this to convey the im-

pression that didactic instruction should be superseded, for there are a multitude of facts in pharmacy which can be impressed upon the minds of a hundred students at one time in the hearing of all, just as easily as upon one personally in the laboratory, but when didactic instruction is supplemented by the practical and personal performance of technical work in the laboratory, the significance of facts is vastly enhanced, and a familiarity in the actual handling of apparatus is secured.

The extension of college work to three full courses extending over three years has now become necessary to adequately embrace the consideration of all the greatly extended subjects of the lectures, and laboratory courses.

The physician who looks upon the druggist merely as a purveyor of drugs and considers that his duty is fulfilled when he can simply supply patients with the medicine that he has prescribed, will doubtless in the future awake to the fact that he can call upon an intelligent pharmacist to originate a special preparation in order to combat a certain disease; to analyze various products which have given unsatisfactory results, to accurately perform urine analysis, or to make a microscopic investigation which will lead to important results. Thousands of pharmacists to day possess the necessary qualifications to thus aid the physician, and with the hearty assistance of the medical profession in the true scientific spirit of recognizing truth wherever it is found and in that broad liberality which casts aside prejudice and preconceived notions, the higher education of the pharmacist must be eagerly welcomed by the lovers of real progress in the medical profession.

#### Recent Determinations of Atomic Weights.

F. W. Clarke has submitted the report of the committee of the American Chemical Society on atomic weights, and from this report as published in the Journal of the society we glean the following data:

As a result of Professor Morley's research on oxygen, which is now completed and has been published in full by the Smithsonian Institution, the atomic weight of oxygen is announced as being for all practical purposes 15.88, with an uncertainty of less than one unit in the second decimal. This is practically confirmed by the results published by Julius Thomsen, who obtained an average of 15.869.

The true atomic weights of helium and argon are still in doubt. Argon being given a density varying from 19.48 to 20.6 by Rayley and Ramsay, the density of 19.9 being considered by them as approximately correct. For helium Ramsay gives the density 2.18, while Langlet assigns to it a density of 2.00. No final settlement of the atomicity of these two elements has been reached. If monatomic their atomic weights are approximately 2 for helium and 20 for argon; if diatomic, their weights are just double these figures.

Below is published a table of atomic weight, the values being given according to both standards, H = 1 and O = 16. Many of the figures are the results of new and complete recalculation from all available data:

#### ATOMIC WEIGHTS ACCORDING TO THE MOST RECENT DETERMINATIONS.

	H = 1.	O = 16.
Aluminum.....	28.91	27.11
Antimony.....	119.62	120.43
Argon.....		
Arsenic.....	74.52	75.09
Barium.....	136.40	137.43
Bismuth.....	208.54	206.11
Boron.....	10.86	10.86
Bromine.....	79.54	79.65
Cadmium.....	111.06	111.62
Cesium.....	131.89	132.89
Calcium.....	39.78	40.08
Carbon.....	11.02	12.01
Cerium.....	138.1	140.2
Chlorine.....	35.18	35.45
Chromium.....	51.74	52.14
Cobalt.....	58.69	58.93
Columbium.....	92.3	94.0
Copper.....	63.12	63.60
Erbium.....	163.0	166.3
Fluorine.....	18.8	19.03
Gadolinium.....	154.9	156.1
Gallium.....	68.5	69.0
Germanium.....	71.75	72.3
Glucinum.....	9.01	9.08
Gold.....	196.74	197.24
Helium.....	?	?
Hydrogen.....	1.00	1.008
Indium.....	112.7	113.7
Iodine.....	126.89	126.85
Iridium.....	191.66	193.12
Iron.....	55.60	56.02
Lanthanum.....	137.6	138.6
Lead.....	205.36	206.92
Lithium.....	6.97	7.03
Magnesium.....	24.11	24.29
Manganese.....	54.57	54.99
Mercury.....	198.5	200.0
Molybdenum.....	95.26	95.96
Neodymium.....	139.4	140.5
Nickel.....	58.24	58.69
Nitrogen.....	13.94	14.04
Osmium.....	189.55	190.99
Oxygen.....	15.879	16.00
Palladium.....	106.56	106.36
Phosphorus.....	30.79	31.02
Platinum.....	193.41	194.89
Potassium.....	38.82	39.11
Praseodymium.....	142.4	143.5
Rhodium.....	103.23	103.01
Rubidium.....	84.73	85.43
Ruthenium.....	100.91	101.68
Samarium.....	148.9	150.0
Scandium.....	43.7	44.0
Selenium.....	78.4	79.0
Silicon.....	28.18	28.40
Silver.....	107.11	107.62
Sodium.....	22.88	23.05
Strontium.....	89.06	87.61
Sulphur.....	31.83	32.07
Tantalum.....	181.2	182.6
Tellurium.....	126.1 ?	127.0 ?
Terbium.....	158.8	160.0
Thallium.....	202.60	204.15
Thorium.....	232.07	232.63
Thulium.....	169.4	170.7
Tin.....	118.15	119.05
Titanium.....	47.79	48.15
Tungsten.....	183.44	184.64
Uranium.....	237.77	239.59
Vanadium.....	50.99	51.38
Ytterbium.....	171.7	173.0
Yttrium.....	88.28	88.95
Zinc.....	64.91	65.41
Zirconium.....	89.9	90.6

#### Note on Commercial Litmus.\*

BY D. RAINY BROWN.

The manufacture of litmus is carried on chiefly in Holland and is prepared from various species of *Rocella*, *Varicaria* and *Lecanora*, and also from other lichens, for the most part natives of the Mediterranean and Channel Islands. There is very little published information to be had regarding the preparation of litmus, as the process of manufacture is kept in the hands of the makers, but the process is somewhat as follows:

The lichens are made into a paste with water, and are allowed to ferment in the presence of ammonia, as in the preparation of archil. When the mixture has acquired a purple tint, stale urine and potassium carbonate are added, and fermentation is then allowed to proceed until the blue color produced is considered to be of the correct tint. It is stated that the best product is obtained in about

\* Pharmaceutical Journal.



40 days. The blue liquor is then mixed with chalk, gypsum, or sand, and, according to some authorities, alum, in order to give it consistency. After molding into pieces of the desired dimensions it is more or less thoroughly dried.

This addition of chalk, sand, gypsum and alum to the blue liquor, to give it consistency, is surely a doubtful proceeding, and very likely to be attended with loss of coloring matter from the formation of an insoluble lake. It would be better to send the litmus into the market either in the form of a liquid extract similar to archil, or else to acidify the solution and precipitate the coloring matter with excess of alcohol, and offer the product in the dry state.

Apparently indigo is sometimes added in the process of manufacture to improve the color of the product. I did not observe any indications of it in the samples which I examined, and, if present, it must have been in very small quantity. This addition of indigo is not to be commended from the analyst's point of view. Indeed, from any point of view it should be objected to as a sophistication, but it is a practice quite on a level with the indefinite crude and unscientific methods, which, so far as can be ascertained, characterize the production of the commercial article. Wartha suggests that the presence of indigo might result from the fermentation of the lichens at the expense of the urine added.

The blue color of commercial litmus is due to varying proportions of a pigment called azolitmin in combination with potash. Azolitmin is a weak acid, and combines with alkalis forming blue salts. It is soluble in water, but insoluble in alcohol.

According to De Luynes, azolitmin may be prepared from orcinol by the treatment of that substance with sodium carbonate and ammonia by keeping the mixture in a closed vessel with water for four or five days at a temperature of 60 to 80 degrees C. On acidifying this solution what is considered to be pure azolitmin is precipitated; this substance is soluble in alcohol, and nearly insoluble in water (Allen, "Comm. Organic Analysis," vol. iii., part i., page 825).

The substance which I have separated and consider as azolitmin was quite soluble in water, but insoluble in alcohol. It cannot, therefore, be the same substance as that described by De Luynes as azolitmin, but it is undoubtedly the coloring matter of litmus, and agrees with the descriptions of that substance given by Kane (*Royal Soc. Trans.*, 1840, p. 298), and Wartha (*Berichte*, 9, p. 217).

Besides azolitmin there are three other coloring matters in litmus—spaniolitmin (which occurs very rarely), erythrolein and erythrolitmin, but as they are of no value as indicators they need not be spoken of here.

I have estimated the azolitmin in nine samples of commercial litmus and get fairly constant results from each sample. The finely powdered sample is exhausted with boiling water so long as any coloring matter is extracted; the water extract is evaporated to small bulk, and after acidifying with acetic acid, the evaporation is continued until the extract is nearly to dryness. The object of adding acetic acid is to form potassium and ammonium acetates, which are both soluble in alcohol. A large excess of 85 per cent. alcohol is added to the acidified solution, which precipitates the azolitmin in a crude state; after standing for 12 hours the precipitate is collected on a

filter, and when dry is washed through, with the smallest possible quantity of boiling water, into alcohol. After standing over night the precipitate is filtered off, and is dried and weighed.

In order to check the results the samples were reassayed by a slightly different method. The finely powdered sample was heated on a water bath with excess of acetic acid, and it was then exhausted with warm alcohol; the residue insoluble in alcohol is extracted with boiling water, which, after evaporating to small bulk, is precipitated with alcohol in large excess. The precipitate is collected, and after exhausting with warm alcohol, is dried and weighed. The products obtained were free from inorganic matter.

Sample.	Per cent. moisture.	Per cent. insoluble in boiling water.	Percent. azolitmin	
			1st assay.	2d assay.
No.				
1.....	2.8	84.3	5.21	5.09
2.....	4.0	73.6	5.54	5.83
3.....	2.0	88.3	4.92	5.02
4.....	1.2	89.8	3.40	3.30
5.....	6.4	60.0	18.55	13.10
6.....	1.6	87.9	4.79	4.75
7.....	2.0	86.4	4.81	4.46
8.....	1.8	89.6	3.82	3.70
9.....	10.1	46.0	14.22	13.98

According to the only analysis I have seen (Mitchell, *Chem. News*, 1876, p. 140), litmus is stated to contain 2.2 per cent. of azolitmin.

Seven samples—Nos. 1, 2, 3, 4, 6, 7, 8—give an average of 4.6 per cent., which is a much higher percentage than that found by Mitchell. It will at once be seen that Nos. 5 and 9 contrast strongly with all the others. They both indicate a high percentage of moisture, a low percentage of insoluble matter, and a high percentage of azolitmin. Even to look at they appeared to contain a much larger percentage of pigment, and one naturally concludes that the process by which they were prepared must have been different from and superior to that of the others. It will also be seen that the lower the percentage of moisture in the samples, the higher is the percentage of insoluble matter, and the lower is the percentage of azolitmin. This seems to indicate that the quantity of chalk, gypsum, etc., added to the blue liquor to give it consistency is not regulated in any uniform way. The insoluble matter ranges from 46 to 89.8 per cent., and surely it ought not to be difficult to attain a higher and more uniform standard for commercial litmus than the results found indicate.

In the process given for the preparation of litmus solution in the appendix to the B.P., it is directed to boil the powdered litmus with successive quantities of alcohol, and then to make a water solution. The treatment with alcohol will remove erythrolein, erythrolitmin and ammonium carbonate, and the water extract will contain azolitmin and potassium carbonate. The presence of the latter is objectionable, because by its alkalinity it may affect the analytical result, and it will render the indicator much less sensitive, as the presence of carbonic acid in titrating interferes greatly with the production of the blue color.

In place of the official formula I would suggest that a method should be given for the preparation of pure azolitmin, of which a suitable solution could readily be prepared.

## The Chemical Laboratories of Germany.\*

By PROF. A. B. PRESCOTT,

University of Michigan.

In the increase of chemical science it is evident that Germany is, and has been for a generation or more, the most productive country in the world. Her contributions to the common stock are and have been the most abundant. This is not to say that Germany leads the other countries at all points.

Of a truth the world is one in chemistry as it is in any other branch of learning. The working literature of the investigating chemist in any country is inadequate if it does not contain, besides the publications of Germany, those of England and the United States, France and Italy, Austria, Holland, and other nations—embodying communications from laboratories in all the countries of civilization. If you set out by course of chemical work to find an answer to any unsettled question, however new and untried your project of work may seem to be, the library will probably reveal that some one in some laboratory, not always in Germany, has either furthered or forestalled your modest effort. The chemists of the Continent say with emphasis that they must read English, and must have the publications of both England and America. If we are looking for the unification of mankind, we find it in the literature of the investigator. So the chemical library of this university, in nine out of ten of its volumes, is identical with the chemical library of a university in Germany or in Switzerland.

### AMERICANS AT GERMAN UNIVERSITIES.

The German universities, it is well known, are strongly attractive to the graduate-students of the whole world, especially to those of countries beyond the Continent, and perhaps most to those of the United States. Among the causes of the attraction we may name their freedom of study, permitting concentration of labor upon the leading subject; their organization for research by the student, under direction of a professor; their reputation for large scientific production, and the eminence of their professors. In what sense laboratories are, in themselves, the attraction to students in the sciences, will appear as we go on. Twelve of the more attractive universities, with five polytechnic schools, registered last year 373 students from the United States at one time. Sixteen per cent. of these, or 59 Americans, took chemistry as a leading study. About half as many, or 8 per cent. of all, were registered for biological or natural sciences as the major study. In philosophy there were nearly as many as in chemistry—indeed there were more if the polytechnic schools are included.† Medicine obtained the highest American number,‡ 75; chemistry the next highest, 59; philosophy, 51; theology, 18; law, 8.

Again, we find the students from the United States, in ratio to the students from Germany and all other countries, number as 1 to 65, for the 17 before mentioned centers of study. The United States send to Germany about two and one-half times as many students as Great

\* *The Phi Chi Communicator*.

† In the twelve universities there were 51 Americans in philosophy against 39 in chemistry.

‡ If Vienna were included the number in medicine would be proportionately increased.



Britain does. Of the English students fully one half are in chemistry, yet these are a third less numerous than the Americans in the same subject. Japan and the other Asiatic countries had last year only 45 students in the above mentioned German universities—perhaps fewer than there were from the same countries in American universities. Among the 4,785 university students at Berlin, France sends 8; Russia, 154; America, 147.

#### STUDENT PARTISANSHIP.

In a German university, among students working together in any subject, there are sure to be many men who have worked in the same subject in other universities. They canvass freely, one with another, the qualities, methods and characteristics of the professors under whom they have elsewhere worked, and recount the college history of this subject, in its educational bearings, as gained at first, second or third hand from the chief universities of the empire. With more or less warmth of partisanship the men contest with each other for their individual preferences among universities and professors all over the Continent, yet chiefly within the confines of this leading subject to which they are all devoted. They are somewhat indifferent to the teachers of other branches; they have the lighter pleasantries about personalities in the faculty, as the men have in other countries; but as regards the various university leaders in their own subject, they are always ready to speak with candor, and often with zeal. Therewith frequently appears a zealous discussion of methods, theories and procedures, not without partisan obstinacy, but all yielding an endless fund of information concerning what is done in the several centers of study, and the authorities as they are known to be.

Each chemical laboratory is known for its director in person; for its "ausserordentliche" professors, and "privatdozenten," severally and in a body; for the efficiency and working excellence of the building and its appliances; and for the general repute of the university to which it belongs. Each chemical laboratory is valued for the standing and helpfulness of those who direct the "arbeiten" for graduation, and for the interest of lectures given there.

#### LECTURES AND LABORATORIES.

In most universities the director gives the cardinal course of lectures, five times or even six times a week, though both semesters, covering the inorganic and organic parts of the subject, in one class for all those in chemistry, in pharmacy and in medicine.

In Berlin, however, the director of the second laboratory lectures upon inorganic chemistry when the director of the first laboratory lectures upon organic; at Leipsic the director of the second laboratory lectures upon physical chemistry and special topics; and at Freiburg the fundamental lectures are given by an associate professor, while the director does not lecture at all.

In the main course of lectures there is therefore a large number of hearers. Each student puts his card upon his seat, and there are not many absentees. The lecture-room is in the chemical building, is finely provided for experimental illustration, and this daily lecture is a sort of central public event for all the laboratory. In most of the universities the main course of lectures is taken but once

as a course by the chemical students, though the course of Victor Meyer is usually taken as many times as the student of chemistry remains years at Heidelberg.

#### AUSGEWAHLTE CAPITEL.

Besides this main course of lectures, daily, by the director, there are very numerous chemical lecture courses on chosen chapters, *ausgewählte Capitel*, and divers special topics, taken anywhere from one border of chemical science to another, these lectures being once or twice or three times a week elected by a small number of the advanced workers, sometimes less than six, and sometimes more than ten in number, each course being offered by a *privatdozent*, or an associate professor. Sometimes such a course is given by the professor in charge. Thus Dr. Friedheim gives a one-hour course on "Constitution of Inorganic Compounds," Professor Schneider a one-hour course on "Bismuth," Dr. Wohl a two hour course on "Carbohydrates," Dr. Rimbach a one-hour course on "Optical Methods in Chemistry," Professor Pinner a one hour course on "Chosen Chapters in Pharmacy," Dr. Anwers a two hour course on "Stereo-chemistry," Dr. Behrend a two-hour course on "Pyridine, Quinoline and Thiophene."

#### QUIZZES.

A colloquium, or review quiz, once or twice a week, is here and there announced, as a course separate from the lectures. It is intended for advanced students, and usually taken by those preparing for examination; often the class consists of six or eight members. On qualitative analysis, which, as a rule, is the first course in laboratory work, but few lectures are offered, and fewer taken; and quizzes are given by appointment in various ways. The same is true of quantitative analysis, except that the volumetric work is more often the subject of a short lecture course. Class room drill, or regular recitation, has no place in the German university system; and from this want, in my judgment, the early laboratory work of the chemical student suffers largely. Not much is expected of the student's first year in the subject that is to be his major study, nor at all of the German student's first year at the university. It is otherwise with a graduate student from America, who has worked through the beginning of his leading study, and who is, moreover, so well used to freedom in his work as not to be at a loss when he becomes his own master.

#### LEADING TEACHERS.

It is sometimes remarked by students in the German laboratories that their most eminent chemists, name in order of seniority, are von Baeyer, at Munich; Victor Meyer, at Heidelberg; and Emil Fischer, at Berlin. From this opinion I should hardly dissent, but I would add other names of nearly equal interest. At Leipsic the honored Wislicenus deserves the fullest admiration; and Ostwald is in physical chemistry the most prolific, and certainly the most quoted authority at the present time. Kekulé is still at Bonn, in the same laboratory that astonished the chemical world by its beauty when it was built (in 1864), and where he put forth the theory of closed atomic chains, which has been a guide in one-third of all the chemical work done ever since. Claus of Freiburg reports a great deal of work in a very interesting field, filling

no small portion of the *Journal für praktische Chemie*. Fittig of Strassburg has given a great deal to chemistry. In organic pharmaceutical chemistry E. Schmidt of Marburg is prolific in work of exceeding interest. These are doubtless the best known chemists in their several institutions, but there are other universities whose laboratories of chemistry require attention.

#### THE FINEST LABORATORY BUILDING IN EUROPE.

The best chemical laboratory building in Europe at present is that at Zurich, Switzerland, completed eight years ago. The laboratory at Strassburg, built a little earlier, and that at Heidelberg, built later, rank next, being buildings of nearly equal excellence. The laboratory at Göttingen is also new, and is, I believe, a fine building.\* The Zurich laboratory cost, Professor Lunge told me, 1,750,000 francs (\$350,000). It is on a commanding site, with plenty of open space around it. There is a curious connection of personal history with these four recent laboratories, which runs as follows: Shortly after Fittig's laboratory was built at Strassburg, Victor Meyer and George Lunge, who were together as chemical professors in Zurich, shaped the architect's plan for the Zurich laboratory. The new building at Zurich was made to agree in some outline features with its neighbor at Strassburg, but was made a good deal larger and more elegant. Before the Zurich building was done, Victor Meyer accepted a call to Göttingen, to succeed the celebrated Wöhler; and here a new laboratory was built for him with great enthusiasm. It was no sooner done, however, than Professor Meyer yielded to a call to Heidelberg, to succeed von Bunsen, on condition that a new laboratory be put up at once. Göttingen did not condone his desertion. He clung, however, to the third new laboratory he had undertaken within three or four years, and Heidelberg hopes he will stay. In this last instance, however, the old laboratory of Bunsen was not removed. It remains as I first saw it in 1873, filling the corner of the city block on both streets, and completely hiding from view the new building which stands in the center of the block, and is connected with the old structure by corridors. In any one of these three laboratories at Strassburg, at Zurich or at Heidelberg, the spacious workrooms, the generous appointments for operations in all branches of chemistry, and the substantial construction in goodly proportions throughout, were a delight to my eye whenever I entered them.

#### HISTORIC LABORATORIES.

Of still greater interest were the historic laboratories. I revisited the building at Bonn, whose fair proportions have often been portrayed in miniature as a symbol of the era of laboratory study. Built in 1864 under A. W. Hofmann, when the latter first came back from his great work of 17 years in England, the laboratory was talked about in all lands. It was planned by Hofmann, who had been a student at Giessen when the pioneer of laboratories was built for Liebig in 1828. In fact Hofmann's father had been the university architect at Giessen. But Hofmann did not stay at Bonn, not even to start the work, for the reason that

\* The chemical laboratory of the polytechnic school at Aix-la-Chapelle ought to be included in this comparison.

he was called to succeed Mitscherlich at Berlin, being himself succeeded at Bonn by Kekulé. August Kekulé had been *privatdocent* at Heidelberg and chemical professor at Ghent, when in 1865, at the age of 36 years, he took charge of the Bonn laboratory. He had been influential in respect to theories of molecular constitution at the world's congress of chemists, held in Karlsruhe in 1860. He had commenced a *Lehrbuch* of organic chemistry (1859), of which only three volumes were published; and though the work was never completed, it has become classical as an original treatise. About five years later (before 1870) he came to Bonn. Kekulé's theory of closed atomic chains was then before the scientific world, and has held undisputed sway ever since. I entered the laboratory at Bonn just in time for a lecture by Kekulé, whom I had not seen before. He is a man of fine and commanding presence, deliberate in manner, clear in statement, now and then pausing or repeating for emphasis. That particular morning he made no experiments on his lecture table, which, however, was well covered with material for illustration. Few American students go to Bonn for chemistry, but Professor Kekulé's assistant, Mr. Parlato, was an American, who had taken his degree at Bonn. As for the interior of the laboratory, I must confess that it is the worse for wear. In 1872 it appeared to be as fair and orderly within as it was chaste and stately when seen from without. In 1894 the workrooms and their equipment were not such as to be very inviting to the observing chemist, or to any one else.

#### LABORATORIES AT BERLIN.

At Berlin the "First Chemical Laboratory" is a plain and substantial structure, close upon the street, and with but little distinction from the adjoining buildings on the block. It faces Georgenstrasse and the steam car tracks, while its rear adjoins the university library on Dorotheenstrasse, a long block from the "Linden." The workrooms are numerous, but not spacious; some of them are good and some are rather shabby; there are many small rooms for distinct researches, and a fair provision for special operations.

The library of the German Chemical Society is in this building; it is quite limited, and is suitable for laboratory reference only. For full chemical reference the students must needs go around the square to the University Library, or further, across the "Linden," to the Royal Library. The halls joining the several parts of the laboratory are tortuous, in some places dark, and in others beset with stairways. The main part of the building was erected in 1867, and when I saw it in 1872 it was in more harmonious proportions than it now is, though I could not ascertain just how the building had been enlarged. A. W. Hofmann was its director from the laying of its corner stone until his death in May, 1892—a period of about 27 years. I found several American students working there, and they regarded their opportunities as of a high order. The Harvard chemical graduates go to Berlin more than to other laboratories in Germany.

#### A YOUNG PROFESSOR.

Professor Fischer has the largest chemical lecture room I have ever seen. It can seat over 400, about one-third being provided for in a gallery. About 300 were listening to Professor Fischer's lectures when I was there.

It is remarked that Emil Fischer is unusually young to have been called to this post, the most responsible chemical position in Germany.

His reports on research began in 1875, and soon followed thick and fast. The most important ones are, first, those on the hydrazins; then those on the xanthine derivatives; and, lastly and overwhelmingly, those on the sugar group. Two years ago he went from his working laboratory at Würzburg to the more executive duties at Berlin.

#### HOW FISCHER LOOKS AND LECTURES.

He is an erect man, above medium height, with a black full beard and a broad white forehead. He lectures to the 800, to the larger audience who are beginning the subject; not to the few who are in the chemical "arbeiten." He admits but few articles of illustration upon his long lecture table; but an assistant stands at each end, and the few experiments which he introduces are made slowly, with a sort of sustained dramatic effect. He is clear and emphatic—indeed they speak of him as eloquent; but he leaves out detail, and avoids complex things. During the hour he does not put more than eight or ten formulæ on the board, each formula being a text, standing uneraser to the end of the lecture.

Professor Gabriel is one of Fischer's associates, and I had the opportunity of visiting his "colloquium" on organic chemistry. It was "privatissimum," to a class of eight or ten candidates, preparing for examination. It was a delightful quiz of an hour and a half, mainly on an assigned portion of the subject, but with free discussion, all in a logical development, and in a most cheerful and unconventional manner. The text was Bernthsen, which Professor Gabriel had in his hand, but by no means followed. The "Second Chemical Laboratory" is under the direction of Landolt, an authority in physical chemistry, and somewhat devoted to inorganic and analytical work. It is an unpretentious little building on Bunsenstrasse, a new street with a chemist's name. The classes in qualitative and quantitative mostly work here. Professor Landolt lectures on several subjects, and last semester had inorganic chemistry at the same hour taken by Professor Fischer for organic chemistry. He is not an easy lecturer, nor generally acceptable in a lecture room. His name will be recognized from his joint authorship of Landolt and Boernstein's tables of chemical constants, which we find so useful.

#### THE CHEMISTS OF THE POLYTECHNIC.

The "Polytechnicum," at Charlottenburg, just at the outer border of the Thiergarten, the great park of Berlin, is closely affiliated with the university, and its chemical opportunities demand mention. The building is new and large, and both exteriorly and interiorly is worthy of the highest commendation. To describe it would take an evening. It includes various little laboratories of chemistry and chemical technology, each accommodating two to six workers, and with every known appliance for the required operations.

The two most eminent of the chemists here are Otto N. Witt, the coal tar dye authority, and Liebermann, the pyridine chemist. Witt was teaching porcelain production, and the building is only a quarter of a mile from the Royal Berlin Porcelain Works. Professor Witt was one of the two German special commis-

sioners at the World's Fair, and he has published a most entertaining report, embodying also an estimate of the chemical manufacturing probabilities in America, and a high tribute to the chemical achievements of American metallurgy. Liebreich in pharmacology, and Kossel in physiological chemistry, are authorities of great interest. Tiemann on the chemistry of perfumes, Rimbach on optical methods for chemical ends, Traube on chemical crystallography, Freund on the chemistry of foods—these are but a few of the many chemical specialists whose classes are open to university students.

#### THE GERMAN CHEMICAL SOCIETY.

The monthly meetings of the German Chemical Society are held in Professor Fischer's lecture room. Here it was that A. W. Hofmann presided from the very organization of the society until his death. The attendance is a scattering one of 30 to 50 out of a large membership.

By a new and improved arrangement each paper is presented in oral abstract by an appointed reader, if the author be not present himself. The discussions at the July meeting were prompt, brief and to the point, and 15 or 16 subjects were disposed of in an hour and a half.

#### LEIPSIK LABORATORIES.

At Leipzig the "First Chemical Laboratory," built in the last of the sixties, conducts a great variety of advanced work, under a good corps of teachers, with Wislicenus as director. The equipment is good, there are sufficient smaller rooms for classification of methods, and there is a constant lookout for improvements; but there is neither elegance nor a very strict maintenance of neatness. Wislicenus, who was rector (presiding officer) of the university last year, is a model of helpfulness to visitors, and his lectures are the perfection of good teaching and masterly grace.

The "Second Chemical Laboratory," that of Ostwald, the author and editor in physical chemistry, has not yet a separate building, but is quartered in half a dozen smaller rooms of the Agricultural Building. Ostwald gives, besides other lectures, a free public course of lectures on the forces once a week. The majority of the American chemical students at Leipzig when I was there were from the Johns Hopkins. They used the one laboratory or the other, just as they would use one or another branch of the same laboratory.

#### THE TEACHERS AT MUNICH.

At Munich the chemical laboratory, von Baeyer's, is on Arcisstrasse, with neighboring botanical grounds; and though not new, it is a commodious building, well provided for a large amount of the best work. It cherishes the working places of Liebig, who was there for the last 20 years of his life (until 1873). The chief associates of Baeyer are Peohmann and Kruess\* in analytical and inorganic chemistry, Koenigs and Thiele in organic. Professor Hilger, the pharmaceutical chemist, is at Munich. I saw Mr. Sherman, formerly of Ann Arbor, and Mr. Faust, formerly at Baltimore, both at work as chemical students. I heard Professor Baeyer and Dr. Kruess lecture. Baeyer's lectures aim at placing the foundations of his subject—that is, chiefly at clearly setting

\* The death of Professor Kruess has been announced since the above was written.

forth the first principles of chemistry, and are given plainly without great illustration. The "arbeiten" in Munich are mostly directed by the associate professors. I am informed that the required preparation for "arbeiten" is of a high standard.

#### NUMBER OF STUDENTS AT THE UNIVERSITIES.

The three largest of the German universities compare as follows:

Berlin, total 4,025, in chemistry as leading study 205, equal to 5 per cent. of all.

Munich, total 3,464, in chemistry as leading study 140, equal to 4.19 per cent. of all.

Leipzig, total 3,067, in chemistry as leading study 114, equal to 3.7 per cent. of all.

At Heidelberg the new laboratory, to which I have already referred, is spacious, orderly and admirably equipped. The old part, however, is still used throughout, and its interior has become very shabby. Professor Bunsen, now 83 years of age, who has given personal instruction to great numbers of men now eminent in chemistry in all parts of the world, retired five years ago.

#### VICTOR MEYER.

Victor Meyer, the present director of the laboratory, is probably the most attractive chemical personality in Germany, both for the direction of *arbeiten* and for his lectures, which are delivered six times a week, at 8 a.m. At the lecture table he is clear and fluent, rapid and orderly in experimentation; and without pausing for emphasis, he gives all the synthetic reactions in unbroken succession, covering the board over and over again with a rich profusion of delineations. Nevertheless, he holds the close attention of the beginners. There are as many chemical students from England and America in Heidelberg as in any two other German universities together.

I visited the Freiburg Mining School, in Saxony, and the analytical laboratory of Fresenius, at Wiesbaden, both of which are well known to chemists. Both these institutions show that important chemical work can be done with simple apparatus on rough tables. At Freiburg there is a considerable American colony.

#### EXPERIMENTAL WORK BY MANUFACTURERS.

Before closing this cursory account of the laboratories of chemistry in the German Empire, I must make mention of the experimental laboratories of the great manufacturing works. These also are places of research in part for publication. I had full opportunities in four of these works: 1, the "Badische Anilin und Soda Fabrik," at Ludwigshafen, with its 4,000 workmen; 2, the Color Works, at Hoescht, 3,000 hands; 3, the United Factories of Zimmer & Co. for cinchona alkaloids, at Frankfurt, and 4, the chemical works of Merck, at Darmstadt. The exhibits of several of these works were included in the great monument of synthetic chemistry, made by German universities, in the educational department at the Chicago Exhibition.

The most appreciative mutual relations exist between the chemical industries of Germany on the one hand, and her university chemical laboratories on the other hand. In fact the liberality of the manufacturers is not confined to the universities of their own country, as we have reason to know, having lately received gifts of large collections from two of

the works just named, with all charges of transportation paid to Ann Arbor.

In the way of investigation the German universities are of inestimable value to learning. In opportunity for the highest study they are scarcely equalled.

It has been a great privilege to me to see even but a little of the chief laboratories of Europe, and I regret that my means of description do not enable me more fully to share this privilege with my readers.

#### Boron Battery.

The *Electrical Engineer* describes a new Austrian battery, which consists of a plate of zinc and one of carbon covered with boron, the electrolyte being a solution of "manganese salt and other substances." The voltage is 2.5 to 3, which is maintained for quite a long time; the cost of maintaining the battery is said to be 1 penny for a ten hours' run, but for what output is not stated. The novelty consists in covering the carbon plates with boron, which is done by immersing them at a high temperature in a bath of chloride or fluoride of boron, then in a solution of oxalate of platinum, after which they are heated in a red heat in an atmosphere of hydrogen. A plate so treated contains metallic boron in its pores.

#### Seeing the Invisible.

By the use of a similar arrangement to that recently described by Professor Salvioni of Perugia, A. A. C. Swinton has succeeded in rendering visible coins inside a closed leather purse, and metal instruments in a wood and leather case, besides being enabled to see a coin through a piece of wood  $\frac{1}{2}$  inch thick or a sheet of aluminum. A tape of opaque pasteboard was employed, with a simple aperture at one end, to which the eye was applied. The other end was provided with an opaque diaphragm of double black paper, upon the inner side of which was laid a piece of blotting paper impregnated with barium platino cyanide in a crystalline state. On holding the purse or other object against this diaphragm and directing the rays from a Crookes tube upon it, a shadow of the coins, etc., was cast upon the platino cyanide paper, which fluoresced brightly under the stimulus of the rays, and so rendered visible the form of the metallic object. Non-metallic objects were less clearly seen, their greater transparency to the Roentgen rays causing the images to be more faint.

#### New Hypodermic Device.

Robert E. Humphries, a well-known druggist of Irwin, Pa., and Charles O. Morris, a prominent dentist, also of that place, have had patented an invention that should prove of value to physicians. It is a hypodermic syringe filling device, and consists of a rubber nipple that fits, air tight, around the mouth of the bottle. On top of this nipple there is a small cup which contains a very slight puncture, and through which the needle of the syringe may be inserted and not the smallest particle of the contents of the bottle will be spilled. As many of the anesthetics are of a very costly nature, and in using the syringe considerable is wasted, the device is said to be favorably looked upon by the physicians and druggists of this section who have seen it.

#### Indian Doctors of South America.\*

BY CHAS. LEDGER.

The Colla-Collas, Collahuayas, called also Chirihuanos, on the coast of Peru, Yunguenos and Charasanis, are a very peculiar race. They come from the villages in the forest-covered ravines of the Bolivian Province of "Larecaja," called Charasani, Corisata and Quirbe, also from Apolo Bamba in the department of "Caupolican," and their knowledge of the virtues of herbs has been handed down from father to son from time immemorial. They traverse the forests of Bolivia and of Carabaya and Cuzco in Peru, collecting their drugs, and then set out as professors of the healing art to exercise their calling in all parts of Spanish America, frequently being two and even four years away from their homes on these excursions. With their "alforjas" or saddle bags of drugs on their backs and chests, dressed in black woolen breeches, a red, closely woven poncho, and broad brimmed black hat, they walk in a direct line from village to village and from estancia to estancia, exercising their calling, and penetrating as far as Mexico in one direction and to the extreme limits of the Argentine Republic and Brazil on the other.

#### IN THE TIME OF THE INCAS.

Their ancestors did the same in the time of the Incas, and Garcilasso de la Vega gives some account of the medical treatment adopted by the ancient Peruvian physicians. They were in the habit of letting blood, generally in the foot, by the "tilcana," a kind of lancet made of flint. They administered the powdered leaf of the sayri (tobacco) for headache, mulli (*Schinus molle*) for wounds, and a host of other simpler herbs for other ailments. The "Cepa caballo" (Bathurst burr), "marsh mallows," and "water cress" are much used as decoctions. Both Garcilasso de la Vega and Acosta mention their knowledge of the virtues of sarsaparilla; yet it is remarkable that the Collahuayas should never have discovered the febrifugal qualities of Cinchona bark. Each professor is accompanied by two or three apprentices from 8 to 20 years of age, each carrying his "alforja" full of roots and herbs. These embryo doctors are sons, nephews, or relatives of the "professor." At different times I've met with Collahuayas that had been to England, France and Spain. They had been taken to Europe by wealthy merchants and travelers, and after a few years returned to their native country. The ever increasing facilities for visiting the interior of those countries, as also the abundance of cheap proprietary medicines distributed all over the interior, will soon close the career of the "Collahuayas."

#### TREATMENT OF PLEURISY.

In February, 1848, I was buying and making contracts for alpaca wool, residing for the time in the town of Juli, one of the numerous towns and villages that surround the great Titicaca Lake, at an elevation of 13,000 feet, when one morning an Indian youth was brought to the house suffering from a very severe attack of pleurisy, called by the natives "costado." The young man was certainly in a most dangerous state, and I considered it a hopeless case. A "Colla-

\* The Chemist and Druggist of Australasia.

huaya" doctor happened to be in the town, and he soon made his appearance. The young man was suffering very great pain and could barely speak. After examining the patient and asking a few questions of the party that brought him in a litter a distance of 30 miles, he asked for a pannikin, olive oil, salt (well sifted), and a "bracero" with lighted charcoal to be brought. He then measured out three tablespoonsful of olive oil, then two spoonful of well sifted table salt, put the oil and salt into the pannikin, placed the latter on the charcoal, stirring and well mixing the oil and salt for exactly 20 minutes. He then took the pannikin off the embers, and as soon as the mixture was cool enough to drink he made the patient swallow the whole of the mixture. The patient was then carried into a room, put to bed, and well covered with blankets. Two mornings after I was surprised to see the young man sitting in the sun quite recovered, although very weak. He soon got quite well, and returned to his duties on the estate. Since that time I never traveled anywhere without taking with me a bottle of olive oil, a tin of well sifted table salt, a pannikin (copper), and spoon especially for use when necessary.

I can safely say I've given this remedy with the best results to very many persons since then. It was no use my disclaiming against being considered the originator of this remedy in cases of pleurisy. I've invariably stated how and where I first saw its application, but go where one may all along the Peru, Bolivian and Argentine (northern) frontiers, everywhere it is styled "El remedio del Ingles Don Carlos" (the remedy of the Englishman Don Carlos). I have spoken of what I had seen as to the efficacy of this remedy to many English, French and native doctors. The late Dr. George Fair of Buenos Ayres, Dr. Richard Vance of Tacna, Dr. Mariano Bueno of Puno, etc., all assured me they had "faith in the remedy." This remedy might be of use in these colonies when, as is often the case, a doctor is too far off and too expensive a luxury.

In 1850, in the month of September, I left Tacna for Puno, taking the upper road, arriving on a Saturday at Mas o'Cruz, while a heavy fall of snow almost made us lose the road, and so caused a flood in the river of Ilavi, compelling me to leave the upper road and take the one by way of the town of Ilavi, where there was a ferry (now a stone bridge). At Ilavi the river is some 200 yards wide, and a large body of water falls into the Titicaca Lake. I arrived at about 3 p.m. at the town of Ilavi, going to the house of my old friend, Dr. Sardon, D.D., curate of one of the districts. As the "cura" was busy at his church, I sat down on one of the benches close to the entrance. My pack mules were unloaded, and I patiently waited for the cura's return, when, suddenly, a Charasani Indian asked me, speaking in French, "If I was a Frenchman?" I replied, in Spanish, "No; Ingles." He then began speaking in broken English, saying that he had been at Liverpool, London, Dundee and several other parts of Great Britain; that he had been taken to Europe by a Mr. Bell of Buenos Ayres. It was evident that he had been indulging too freely with "chica" (a beer made from maize), and I was very glad to see my friend Dr. Sardon approaching, when the Charasani Indian went away toward the river. Dr. Sardon received me with the

greatest kindness, and with the customary hospitality invariably to be met with by a traveler all through the interior of those countries.

#### AN ADVENTURE WITH A CALLAHUAYA.

A short time after, just as dinner was announced, several officers appeared. Introductions were gone through, questions were asked as to what news had I brought from the coast, etc., and, after passing a pleasant evening and seeing that my servants and mules were well looked after, I retired to my room rather early, as I wanted to be off by 6 a.m. the next morning so as to arrive at the city of Puno next afternoon. Between 1 and 2 o'clock I was awakened by a tremendous knocking at my door. Calling out to my servants, who were sleeping in a passage close to my room, and, lighting a candle, I was told that two officers particularly desired to see "the English gentleman" stopping at the curate's house. They came into my room and said: "The commandant apologizes for troubling you at such an unseemly hour, yet begs that you will do him the service to accompany us to the barracks where he is suffering from a bleeding from the nose." I dressed and accompanied by the officers and one of my servants, proceeded to the barracks, distant about 300 yards. On entering the commandant's room, I found that he was an old acquaintance, Colonel Chamorro. In the room was also the Indian doctor with whom I had conversed during the afternoon; he appeared to be in charge of two soldiers. It was told me that the Indian being drunk and quarreling with some of the soldiers had been arrested and was told he was to be recruited and made into a soldier. He protested, being a Bolivian, against being compelled to serve in the Peruvian Army; moreover, he had a passport from the authorities of his own country.

#### THE PRODUCTION AND CURE OF EPISTAXIS.

The colonel was suffering great pain from toothache, and being told of the arrest of the Indian doctor, he had him brought before him. The doctor protested most vehemently against being arrested and made a Peruvian soldier, being a Bolivian. The colonel asked him if he, being a Callahuaya, could cure him of the toothache from which he was suffering; the doctor said he could relieve the pain. A soldier was sent to bring his "alforja" (saddle bag) of remedies. The soldier soon returned accompanied by two lads (apprentices) that brought the alforjas. The doctor then gave a powder to the colonel and told him to smell it and take it as snuff; in about ten minutes commenced a flow of blood from the nose; the Callahuaya then said: "Now, you will die. I don't care what you do to me, I won't be a soldier! I can stop this bleeding, but I will not unless you set me free." After a short time Colonel Chamorro promised to give the doctor his liberty if he stopped the bleeding. It appears the doctor then said, "Send for the English gentleman stopping at the curate's, and if he guarantees that you will set me free I will stop the bleeding." I was then sent for as stated. The colonel asked me to take charge of the Indian and assured me that he would carry out the agreement. The Callahuaya then gave him another powder to smell, and very soon after the blood ceased to flow. I should say there was a pint of blood in the basin the colonel held in his lap. Very soon after,

accompanied by the "Callahuaya" and his two lads, I went back to my room at the curate's. Early the next morning I proceeded on my journey to Puno. After stopping some five or six days at Puno, I went by way of Vilquechco and Cojata to Pelechuco in Bolivia, where José Huanca, the Callahuaya and his two boys left me to go to Charasani, their home. Before leaving he gave me a quantity of each powder—one of a light yellow and the other a light brown color. He refused to give me any information respecting the roots from which he obtained the powders, saying it was a secret he dared not tell to any one. I have several times bought small quantities of both powders from different "Callahuayas," but could never obtain a piece of the roots or any information as to where grown or found.

I have given a small quantity of each powder to Drs. Hamilton and Vance of Tacna and to Dr. Geo. Fair of Buenos Ayres. The latter gentleman informed me in 1882 that he had tried it on one occasion only, but with great success as the result. In 1857, when engaged in my alpaca enterprise, we met José Huanca, accompanied by several other compatriot Callahuayas. They were camped with a troop of mules on one of the most inaccessible grand swamps (cienegas) known only by themselves to exist. They had been absent from their homes at Charasani nearly four years, and the troop of mules, aperos (saddles), etc., they possessed had been in payment for their professional services and medicines supplied. It was toward the end of January, 1857, that we met. After some 20 days they left us on the fine large "Cienega de Autofagasta," hoping to reach their homes by the middle of May.

In 1848 I was working a copper mine in partnership with my brother Arthur and a Mr. George Backhouse at "Tarata," distant 75 miles from Tacna. Mr. Backhouse going into the mine one afternoon, slipped and received a severe contusion of the right knee cap. He suffered very great pain, inflammation set in and we were obliged to send to Tacna for a doctor. This cost us an outlay of \$150, equal to £30. Following instructions, poultices of linseed and of bread and milk were applied six times daily (night and day) for more than two months. Little or no relief resulted, and we were intending to expend another £30 through another visit of a doctor from Tacna, when suddenly appeared at the mines several "Callahuayas." Mr. Backhouse had been confined to his bed nearly ten weeks and was very weak, suffering also great pain. When he was told of the arrival of the Indian doctors at the mines, he at once expressed the wish to consult them as to his own case. My brother sent for them to the mines, distant about two miles from the Indian town of Tarata. I, accompanied by two of the head Callahuaya, and several of the lads belonging to them, at once started for the town. On arrival at our residence the doctors examined Mr. Backhouse's knee, asked a few questions as to how the accident happened and what had been done toward curing the wound. They then prepared a poultice of cepacaballo (known in the colonies as the Bathurst burr) leaves, ordering the patient to drink a tumbler full of a strong decoction of the same every four hours. The next morning the doctors arrived very early, producing a quantity of quince leaves; with these they covered



the "sore," the clean shiny side down, ordering fresh leaves to be supplied every six hours. The eighth day after the application of the quince leaves Mr. Backhouse was able to get up, feeling very much better and free of all pain. In less than a month he was able to walk to the mines, and was quite restored to health. Although the Collahuaya doctors asked for \$5 for their services, Mr. Backhouse gave them \$10, as also giving them presents of knives, a small silver compass (this was highly valued) and sundry other articles.

#### TROUBLES OF A CINCHONA COLLECTOR.

George Backhouse was a son of Mr. John Backhouse, a clerk in the Foreign Office under Mr. Canning, and afterward Under-Secretary of State for Foreign Affairs from 1827 to 1834. He was also on the Council of the Royal Geographical Society from 1836 to 1841. Young George Backhouse went out to Peru as an adventurer, and in 1851 joined the expedition into the bark forests in the Department of Cuzco, which was led by Colonel Bolignesi. He discovered large patches (Manchas) of Calisaya Cinchona in the Santa Ana and Marcopata valleys. My brother Arthur and I joined in the enterprise, and I forwarded from Puno (1851) stores and merchandise to value of £1,405 to Backhouse's

agent at Cuzco, who sent them on to Backhouse. In May, 1852, I received a letter from Colonel Nadal of Cuzco, telling how poor Backhouse had been murdered by the savage Chuncho Indians, and all our investment was lost. Subsequently his journal and other papers were sent to me, and by the former I read how he had collected more than 1,000 quintals of Cinchona bark of superior quality, as also 5 pounds of gold—in dust and nuggets. However, bark, gold, stores, merchandise, etc., were all stolen, the hut and stores being burned by the wild Indians. The journal and papers were preserved by an Indian who had served poor Backhouse, and by him given to Colonel Nadal at Cuzco. Reverting to the cure of poor Backhouse's knee by application of quince leaves, I repeatedly since then have recommended their application in various parts of South America with most satisfactory results, especially in cases of long standing sores on the shins. This simple remedy might benefit many people in these colonies—in particular such as are far away from medical attendance. The cepacaballo (Bathurst burr) has great medicinal virtues. As a blood purifier (as a decoction) it is very extensively used in South America. The marsh mallow and "fat hen" are also highly extolled by the Collahuayas.

this name is put up for sale by the makers of artificial wine essences, imitation whiskies, brandies, etc., but we do not think the formula has ever been published.

**Green Deposit on Capsules.**—H. H. B. incloses a sample of capsules and asks us for the cause of a greenish deposit which has made its appearance on the inner surface. The capsules have the following composition:

Camphor.....	gr. xxiv
Phenacetin.....	3 m.
Caffeine citrate.....	gr. xij.
Ft. caps. No. xii.	

We can give no other explanation of the change than to ascribe it to the separation of some coloring material in the gelatin composing the capsule. The color is formed on the gelatin, and appears to be entirely absent in the mass.

**Colored Stains for Show Bottles.**—M. G. & G. request formulas for making different colored stains for show bottles. The large size of the bottles used makes it inconvenient to use liquids, and a stain would be preferred.

An English pharmacist uses a solution of aniline dye in gelatin. We reprint the following description of the process employed from a back number of the *Druggist*.

For a 5 gallon show bottle:

Aniline dye.....	gr. xxv
Gelatin (not opaque).....	3 j
Water.....	3 v
Carbolic acid.....	3 j

Soak the gelatin in water, dissolve the dye in warm water, and next add the softened gelatin and warm till melted, then add the carbolic acid. When the solution has cooled to about 150 degrees F., pour it into the bottle. Place the bottle in a warm position until it has acquired a temperature of from 90 to 100 degrees F., and then remove; now keep turning it upside down and round about until the gelatin shows signs of settling, then put it on its stand and allow the jelly not adhering to the sides to settle at the bottom. Leave the stopper out for a few hours. If the first attempt is not a success, it is only necessary to put the bottle into a warm place and try again.

As to the colors the following have been tried:

Malachite green, a good color to work with, and strikingly like copper sulphate solution; about 25 grains to 6 ounces is required. The color fades somewhat, so that it is well to make it a trifle dark.

Methylene blue, 15 grains; a rich color very like ammonio sulphate of copper.

Methyl violet, 15 grains, a rich bluish red; can be made to vary according to the dye used. Technically, R. means red, R.R. redder, and R.R.R. still redder. The blue shades are similarly indicated by the affix B.

Flamingo gives the nicest red of those he has tried, 15 grains.

Browns may be got with Bismarck brown; brownish yellow with the same dye in smaller proportion, but the colors are not so striking as those named earlier. Methyl orange is wanting in brightness and transparency.

Of course, if the window is exposed to the sun, the film must be allowed to harden well before being placed in its position. The carbolic acid or some other preservative is required to prevent molds from liquefying the gelatin. The weight of a 6-gallon show bottle is thus reduced from 58 pounds to 10½ pounds, and the ease in handling and safety when in position are great gains.



We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of any unusual compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the labels used on packages of the compound should also be sent.

**Silver Cream Paste.**—C. L. M.—We have not completed our examination of this article. A reply will be given in our next issue.

**Cane Alcohol and Grain Alcohol.**—J. A. H. asks us to publish a simple method of distinguishing New Orleans cane alcohol from the pure grain spirit; also the difference between them for pharmaceutical and medical uses.

We know of none. When alcohol is produced from grain the starch of the seed is first converted into sugar, and this subsequently changed to alcohol. In the production of alcohol from cane sugar the sugar is probably first converted into glucose, and this by direct alcoholic fermentation is made to yield alcohol just as in the case with grain. If pure it is unlikely that any difference between the two products could be detected.

**Furniture Polish.**—C. L. M.—The following are fair types of the preparations asked for:

Beeswax, finely divided.....	2 ounces.
Turpentine.....	¼ pint.
Alkanet root.....	¼ ounce.

Digest the alkanet root in the oil of turpentine, add the beeswax, then put the vessel in hot water and stir until the contents are dissolved. Apply with a woollen rubber.

The following is highly recommended as a fine, lustrous polish for delicate cabinet work, pianos, etc.: Half-pint linseed oil, half-pint old ale, the white of an egg, one ounce alcohol, one ounce hydrochloric acid. Shake well before using. A little to be applied to face of soft linen pad and lightly rubbed for a minute or two over the article to be restored, which should first be rubbed off with an old silk handkerchief.

**Bead Oil.**—H. A. O. writes: Would you please inform me how to make the so-called bead oil—that is, the oil used to give a bead to liquors. I have tried a combination of sulphuric acid and olive oil but the results are not satisfactory.

We understand that an article bearing





## Advertising Aid, how, when, and where to Advertise.

PRACTICAL HINTS AND SUGGESTIONS. CRITICISM AND CONSTRUCTION  
OF ADVERTISEMENTS.

In Charge of Ulysses G. Manning.

The department editor will be pleased to criticize any advertisements submitted and to suggest improvements. Questions answered and advice given. Our readers are cordially invited to avail themselves of this help.

### SAYING IT.

A CORRESPONDENT naively asks, "How long should an ad. be?" I would be equally lucid if I said "long enough." There are writers who champion extreme brevity and others who have won success, though they crowd words into their ads. to the verge of verbosity. It is doubtless "better to be brief than tedious," but I have never believed that a few unnecessary words could materially hurt the ad. that really said something.

If our correspondent wants to know how many words can be employed in a given space, I would say, that where room for display is to be provided for, 15 or 20 words to the inch, single column, is the limit. A 4-inch single column space does not demand 60 or 80 words, however. If the advertiser has but 20 words to say, he should say them and stop. Don't think about your space or how an ad. is going to look or sound. Think of what you are trying to sell and the arguments that would be required to sell it if you faced the customer. Determine what you have to tell and then tell it in as few words as you can without sacrificing clearness. An idea may be smothered in words or lose its force through undue repetition, but an inexperienced advertiser who attempts brevity is apt to fall into the opposite error, and as a result his production will lack clearness and completeness. The important thing is that you make yourself understood. It is not necessary that you be brilliant, startling or smart. Be natural. Write as you think and be in earnest about it. To express yourself simply and clearly is not so easy as it appears to be, and until this essential is acquired the flourishes may be omitted.

The idea that advertising to be effective must be "smart," is responsible for a good deal of strained wit and overworked brilliancy. It is far more essential that you tell your story so plainly that the duller of readers may understand.

Right here I want to state that the ad. that leaves the least vivid impression as an ad. is the one that sells the most goods. It is the ad. that leaves a vivid and favorable impression as to your goods or methods that is the effective one. The man who is conscious of a brilliant and subtle attack on his pocket-book arms himself against it. This is the reason that many an ad. that commands attention fails to bring business.

This is a good place to refer to a communication recently received: A correspondent sends four ads. and states that they were written for him by a prominent New York ad. writer. He wants my opinion of them and says: "I can guess what you will say, for I think I can tell a good ad. and consider these 'pretty rocky.'"

He will have to guess again, for I consider them good. I presume he thinks the ads. too simple—perhaps commonplace—and imagines that he could do much better himself. I doubt this. There is nothing remarkable about the ads., but they are clear, sensible and convincing. The writer perhaps took into consideration the character of this man's trade, the ads. of his competitors, and the personality of the client himself as well as it could be determined. Because of this the ads. don't suit. I believe it is the experience of every ad. writer that the people easiest to please are those who know most about advertising and who have, by experience, learned what sort of ads. sell goods. Old maids want to be

flattered by their photos. Many inexperienced advertisers are guilty of the same weakness in regard to their ads. They want to dazzle readers by their brilliancy, forgetting that this is not the aim of advertising. The ad. that scintillates with wit and sparkles with epigram may win sales, but in the long run is pretty sure to be distanced by the ad. that talks plain business.

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### Criticism and Comment.

Fisher & McClallan, Rutland, Vt., submit an eight-page catalogue they have been distributing. One page is devoted to a talk on their business methods, one to prescriptions and one to their specialties. The remaining pages are filled with lists of goods—largely sundries. Advertising of this kind ought to do some good. It lets people know what you have and is apt to impress them with the extent of your assortment. The setting of this circular could have been better. Its advertising value would have been increased if prices had been more freely quoted. Telling people of desirable goods amounts to little, unless you tell them what they cost.

This fear of price quoting kills lots of advertising that would otherwise prove effective. If specific prices are out of the question, at least give the range of prices. Hot water bottles from 75 cents to \$1.75 gives some information and is better than nothing. Pages of lists are not very inviting. A little running comment wherever an article or line presented talking points, would help to lure the reader through them.

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### DON'T SCATTER.

Bass & Bro., Terrell, Texas, send ad. for criticism. It is 4 inches deep and five columns wide. This is a good deal of space, and if the paper has a respectable circulation the right kind of advertising should bring results. Present ad. is well displayed, but it lacks force; scatters too much. Three or four things are talked of and none of the subjects are treated conclusively. Several things could be advertised in a space of this size, but the arrangement should be different. Each subject should have a separate heading, with a rule or some white space between. A space of this size should extend down the columns instead of across them. In present ad. the lines are too long. Long lines are hard to read. The best plan would be to break the space up into three or four columns by means of rules and in each of these divisions advertise some one thing. A short general introduction in very large type might extend across the entire top of the space if desired. There is considerable wasted space in the ad. as it is, that can be utilized if style of setting were changed.

There is a general hint here for all those who desire to economize space. An ad. should always be deeper than it is wide, or if not, long lines should be avoided by the introduction of columns. Short lines are desirable, not only because they are easier read, but also for the reason that they prevent waste in display. Have a space five columns wide and use a headline that extends across two columns; there remains three columns of white space, the width of your headline

that is practically wasted. This same waste follows wherever a short line is used.

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#### ANOTHER ADVERTISING PAPER.

Geo. C. Frolich, Mamaroneck, N. Y., forwards copy of his advertising publication—the *Oriente*. It is similar to a number of others that have received comment here. He carries the ads. of other merchants. The scope of the publication is set forth in the following sub-heading: "The *Oriente*, an independent monthly issued for the purpose of benefitting the merchants of Mamaroneck through its value as an advertising medium, being at the same time a valuable reference table for data about mails and train time, meetings of societies, church notes and social events, and at the same time entertain both young and old with a good story. Price 25 cents a year." I presume the price is not insisted on and that the paper has free circulation. I think Mr. Frolich is too modest in reference to his own name and business. I find the two connected but once in one of the papers and then in a two-line notice only. True, there are a number of *Oriente* preparations advertised in the sheet, and we are to assume, I presume, that Mr. Frolich makes them. Every ad., however, should state this. It does not do to rely much on the sagacity of the public. There are a host of good, honest people who are a trifle dull and a lot more who, though not dull, are careless readers. The advertiser must look out for details and make his announcements as plain and comprehensive as possible or he will miss fire pretty often.

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#### A DISTRIBUTION OF CIRCULARS.

J. R. Thompson & Co., Allegheny, Pa., submit a newspaper ad. and a circular for criticism. Both are good. The circular is written in colloquial style, impresses the location of the store on the reader, calls particular attention to two or three lines of goods and ends by giving a short list of prices.

These are all good features for a circular, and when well printed on good paper, as is this one, the advertising is sure to do some good. The circular was sent out by mail, I should judge.

I will repeat here the request made several times before, that those sending in special printed matter of any kind tell the manner of its distribution, and also what results, if any, they see from the advertising.

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#### ADVERTISING STATIONERY.

The newspaper ad. of Thompson & Co. is on the subject of paper. They tell something of how paper is made, then call attention to the various lines they handle. The fault of the ad. is that it is too crowded. Half the amount of matter with a head line three times as bold would have been better. The general fault of all the ads in the little paper containing that of Thompson & Co. is their crowded appearance.

Use part of the space to make the ad. prominent. Direct the printer to leave at least  $\frac{1}{4}$  inch of white space all around the ad. Make the heading very bold. Count the words and use about half the number in the next ad.

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#### ANOTHER GOOD AD. FOR MR. SMITH OF WISCONSIN.

I reproduce one of the ads. of Ed. O. Smith of Janesville, Wis. They are

always excellent, well displayed, and he changes daily.

#### Maxims.

The treatment of customers is of no secondary importance. Wait on them promptly and courteously. Treat them in such a manner that when they leave your store they will always be satisfied and have the impression, "that is just the place to buy."

Always treat children as well as you would those who send them to your store.

Hire as clerks men well posted, energetic and courteous and pay them all you can afford to.

Keep your book account as small as possible. Have frequent settlements with your customers, and at stated times. Have them understand this is a part of

Almo Jelly Cores Chaps in One Night.

## Queen Helen

is a most delicious perfume. June Bells is one of the same kind. An important quality in a perfume is its delicacy—the fragrant and refreshing odor that steals o'er the senses and suggests the freshness of spring-time flowers.

We are sure that we can please you. Bring in your handkerchief and have it perfumed free.

Fresh Cut Flowers every day

## Smith's Pharmacy.

A CLEVER AD. FROM WISCONSIN.

your business, and they will respect you more and will increase their trade.—*The Iron Age*.

#### Rules for the Drug Store.

A Gardiner (Me.) druggist's clerk has no notion of leaving undone the things which should be done and he doesn't propose to trust too much to his memory in the matter, either. Behind the prescription counter is a little slip over which he "throws his eye" ever and anon during the silent watches of the day. The slip bears most significant reminders. "Fix fires; sprinkle; dust; clean every showcase and rub soda fountain; clean glasses; fill and clean glasses; clean chimneys on lamps; dust again; look around and see that things are in proper place; fix fires; read all papers and cheap books and advertising matter; go skating." This mixture of business and pleasure is deserving of the warmest commendation.

#### Returns from Circulars.

According to *Printers' Ink*, A. Cressey Morrison, manager of the advertising department of the Pabst Brewing Company, Milwaukee, Wis., says that circular distributors do not appear to appreciate the value of advertising matter, his company having at one time been actually sued for damages for the stoppage of a city sewer in which were found 12,000 of its booklets, which, had been intrusted to a distributing concern. The returns were large from the sewer.

#### Eyes Are Roentgen's Rays.\*

Though the retina may be fluorescent to the Roentgen rays, as is the glass of the photographic plate, it is hardly probable that it could see objects directly through layers of wood, aluminum, flesh, etc. This, however, does not exclude the possibility of seeing them indirectly, by transforming, so to say, the Roentgen rays into ordinary luminous rays before they reach the eye. I have made a simple arrangement by means of which I can distinctly see the shapes of bodies enclosed in boxes of cardboard, aluminum, etc. This cryptoscope, which I have the honor of showing to the Academy, consists of a small cardboard tube about 8 cm. high. One end is closed by a sheet of black paper, on which is spread a layer of fish glue and calcium sulphide (there being no barium and platinum cyanide at hand); this substance I have found to be very phosphorescent under the action of Roentgen rays. Within the cardboard tube at the other end, at which the eye is placed, is fixed a lens, giving a clear image of the phosphorescent paper. On looking through this cryptoscope one can see, even in a light room, the shape and position of metallic bodies enclosed in boxes of cardboard, wood, aluminum, and within the flesh. Its action is obvious; the fluorescent paper under the action of the rays is illuminated only in those portions which receive rays, consequently the silhouettes of the objects intercepting the rays appear dark. In this there is, of course, nothing new which could not have been deduced from the original experiments of Roentgen; the novelty, if indeed it is so, consists merely in making use of the known facts to design the arrangement.

It seems to me that, in a more perfected form, it might be of extensive use in surgical and medical science. The sulphide of calcium may be replaced with advantage by the cyanide of barium and platinum. It is further clear that when, by a camera or other means, not only the shadows, but also the images, can be photographed (which, I believe, Professors Battelli and Garbasso of Pisa, have already succeeded in doing), the same cryptoscope will render visible also the images of bodies enclosed in wood or other materials.

#### Patent on Chemical Formula.

The Circuit Court of the United States (S. D. N. Y., Matheson vs. Campbell, 69 *Federal Reporter*, 597) says that the fact that an all-ged chemical compound was commercially sold and used in this country prior to the date of the application does not invalidate the patent, when such compound was made in a foreign country by a secret process, not discoverable by inspection or analysis.

\* Nature.



## NEWS OF THE FORTNIGHT.

### Arguments on the Alcohol Tax.

There is no disposition shown on the part of the Government to hasten the action of the Court of Claims upon the alcohol rebate claims which have been filed by manufacturers, and the retail trade are beginning to manifest some interest in the matter. Dr. Huested's argument of the case from the retailers' standpoint appears on this page.

### Co-operative Manufacturing.

The Boston pharmacists have subscribed promptly and liberally to the capital stock of \$10,000 with which they are to undertake co-operative manufacturing.

### Pure Food Laws.

Pennsylvania is apparently about to emulate her neighbor, Ohio, in the "pure food" agitation, and there is some trepidation felt lest the law should be administered in an oppressive manner.

### Ohio.

This Buckeye State furnishes two highly sensational developments. Things are not quieting down, "on the contrary quite the reverse," for on page 196 we give a detailed account of an alleged bribetaking by an official connected with the commission, which charge, whether true or not, sufficed to oust Commissioner McNeal. Some interesting side lights are cast on life in New York, and one wonders what those gay old bachelors saw during their rounds.

A State Senator has actually been convicted on the alleged charge of accepting a bribe (p. 198) for furthering an amendment to the present pharmacy law. Considering that the amendment failed it would seem that the pharmacists interested have made a sorry investment.

### Forcing the Issue.

We refer in our editorial columns to efforts now being made by the firm of John D. Park Son's Company of Cincinnati to compel local wholesale druggists to supply this firm with goods. Interesting developments are anticipated.

### The Alcohol Tax Question.

The majority of the agitation of this question so far has come from the manufacturers who have large pecuniary interests immediately at stake and who are consequently urging upon the Court of Claims the necessity for prompt action upon the claims filed. Of late, however, some opposing views have been heard, and Dr. A. B. Huested of Albany, chairman of

#### A COMMITTEE OF THE NEW YORK STATE PHARMACEUTICAL ASSOCIATION,

has presented a statement to the chairman of the sub-committee of the Ways and Means Committee in which Dr. Huested reviews at length the action taken at various times by pharmaceutical associations in opposition to free alcohol, and declares that neither the consumer nor the retail druggist could possibly reap and benefit from the enforcement of Section 61.

Referring to the opportunities for fraud, which he asserts would be given by a free alcohol law, Dr. Huested says that "ginger drunkenness" is now rapidly growing in prohibition States, and that with free alcohol "this would be promptly followed by drunkenness from (medicinal) elixirs, wine and beef (with the iron left out), tincture of gentian compound, compound tincture of cardamom, etc., which would be sold for such purposes, should free alcohol obtain in the arts and manufactures; and we would soon have a prolific crop of patented or non-patented 'stomach bitters,' 'vinegar bitters,' etc., put up by the pharmacist, in 10 and 15-cent bottles, and sold all over the country without restraint from any law."

Dr. Huested declares that it is inconceivable that Congress would authorize "the enormous expenditure necessary to successfully regulate the small manufacturing of the 80,000 or more druggists in this country, and yet it is perfectly evident that if this was not provided for this class of dealers would be turned over bodily to the tender mercies of the few powerful and wealthy manufacturers," and he adds that in his opinion many wholesale druggists are equally opposed to free alcohol.

In conclusion, Dr. Huested says that "so far as I am able to judge the government will be a heavy loser in revenue should Section 61 go into effect; the druggist, wholesaler and retailer, together with the manufacturer of chemicals, will not be benefitted; the sale of intoxicating compounds disguised as medicinal and 'like preparations' will be enormously increased, and, after all, the measure will then be found thoroughly impracticable."

### Phenacetine Sellers Courting Arrest.

PHILADELPHIA, March 28.—The vexatious phenacetine question is again agitating the druggists and customs officials in this city. This time this drug is being offered by the representative of a reputable house in Montreal. It is understood that the person who is selling the drug here courts arrest. A few days ago the salesman called upon Druggist Boring, at Tenth street and Fairmount avenue, and offered to sell phenacetine at 65 cents an ounce, which is 35 cents below the regular price. He represented himself to be an agent for a prominent house in Montreal, and when Mr. Boring refused to purchase the drug, the salesman, believing that it was on account of being afraid of the law relating to the sale of this article, told Mr. Boring that if he had any doubts on the subject he had better go out and get an officer and he would wait until he came back, as he nor his house did not fear arrest. He also said that there had been a number of suits, but in every case no conclusion was reached, and in the majority of them a compromise was made. From the way he talked it is understood that an effort is being made to have a test case made of the right to sell this drug in the United States. The Government of the United States allows the importation of this drug, but all packages are marked "Not for sale in the United States." It is claimed by many prominent druggists that they have a right to sell this drug, as many houses manufacture it in Germany, and the sale should not be restricted to one house in this country.

### Co-operative System to be Pushed.

BOSTON, March 19.—At the last meeting of the Apothecaries' Guild, held in Young's Hotel, there was a large and interested number of members present. After talking over various matters of minor importance, and taking occasion to congratulate W. W. Bartlett on his success in the defeat of the Pharmacy bill, the Guild took up the matter of establishing a co-operative system, and organizing a company for the manufacture of druggists' supplies. It was decided to have the capital stock fixed at \$10,000, with shares at \$25 each. So quickly was the stock subscribed for that very little, if any, remains unsold.

#### PLANS OF THE CORPORATION.

In conversation with one of the prime movers in this plan it was learned that the proposition is to manufacture the goods in a first-class plant, to be located near the city. The corporation will start first to manufacture sarsaparilla, then a celery compound, pills, two kinds of plasters and a laxative. This list will be gradually extended. The sarsaparilla will be made to sell at a price better than the best price named by the "cutters." The co-operative price will be sixty cents, whereas the cut price is sixty-seven cents. The other goods will be put on the market at an equally low figure.

There is no intention on the part of the promoters of the co-operative plan to force the goods upon the market. Druggists will not be required to take the goods, and then shove them back on the shelves where they will become forgotten. The Guild will advertise the goods extensively, and create a demand for

them. What the members of the corporation depend upon will be the commendations of dealers carrying them, and in time it will find a large response from the buying public. There are so many dealers who will have these goods, that people will begin to inquire about them and to demand them. Of course, the drug store will continue its regular lines so long as it can procure them. This plan is being put in shape, so that by April 1 the company will have goods to sell.

### How the Detroit Plan Works.

PHILADELPHIA, March 19.—The Detroit plan, which has lately been adopted by many of the proprietary manufacturers, is causing considerable talk in the trade. Some of the retailers are averse to it on the ground that it only benefits

the jobber, but as a whole, after a careful canvas, it is found that most of the grumbling comes from the cutter, who is compelled to buy all his goods from the jobber direct, as he cannot secure them from the manufacturer. A well-known druggist, in referring to this subject yesterday, said: "As a matter of fact, I know positively that the cutters, who buy nearly all of the preparations controlled by the proprietors, have gone into this new plan at the long prices, or precisely the same prices as the ordinary retailer, and are only getting the benefit of the same discount of, say, 5 per cent. on sub-quantities, which, of course, is open to all retailers as well. This only goes to show that the cutter is now compelled to buy direct from the jobber, something which he has not done for some time past; in this way the retailer is benefited, as he is on an equal footing with the cutter."

ing an article from one of the Columbus papers giving a digest of the allegations made by the *Cleveland Leader* as a preamble. Before this could be done the quorum vanished, and the resolution was left in the air, so to speak.

### THE INVESTIGATION.

Directly after the opening of the House of Representatives on Monday afternoon, March 9, Representative Deaton of Miami County arose and reported the amendments to the resolution left unacted upon Friday. These amendments simply enumerated the charges made in the press against Dr. McNeal. In this shape it was unanimously passed, and the chair appointed a committee. The Senate without discussion concurred in the House amendment. Senator Sullivan of the joint committee received the following communication:

### CHARGES OF MAL-ADMINISTRATION.

To the Committee on Investigation, relating to the office of Food and Dairy Commissioner of the State of Ohio:

Gentlemen: On behalf of and as the attorneys for A. J. White, president of the Predigested Food Company of New York, we desire to appear before your committee and file in his name and behalf charges of mal-administration and corruption in office against certain attaches of the office of Dairy and Food Commissioner.

We desire to be informed of your time of meeting in order that this may be done.

The Investigating Committee held its first session on the same night. State Food and Dairy Commissioner McNeal and a number of his subordinates occupied front seats.

Among those of the department present were: Judge Amos Dye of Cincinnati, who has been the Commissioner's legal representative at the Queen City for some years; Assistant Commissioners Luebbing of Cincinnati, and Stewart of Cleveland, and Deputies Sterritt of Troy, Sells of Columbus, Knauff of Caldwell, Mansfield of Findlay, Holmes of Toledo, Rentrap of Cincinnati, Dye of Marietta, Hastings of Ironton, and Lowry of Cleveland.

Colonel T. E. Powell and Hon. Daniel J. Ryan of Columbus were present as attorneys for A. J. White, who was to play the leading rôle

### IN THE PROSECUTION.

Hon. T. J. Keating and Charles M. Case, both also of Columbus, appeared as the legal representatives of Commissioner McNeal and those of his subordinates who were supposed to be involved.

Mr. Ryan first read the affidavit of "A. J. White, president of the Predigested Food Company of New York." Mr. White's affidavit stated that his business was selling Paskola; that his rivals in business caused to be published an article derogatory to the Predigested Food Company, and that prosecution was at once begun by Deputy Food Commissioner Luebbing, at Cincinnati, against a Cincinnati firm for selling Paskola.

"When this case was pending, and also another in Cleveland, against a dealer in Paskola," said the affidavit, "I received a letter from Mr. Granger saying that a newspaper reporter had called upon him and stated that Dr. Sterritt, the assistant commissioner, had told him that the Paskola case ought to be settled, that the proceedings were a mistake, but that it was

### AN HONEST MISTAKE.

Some days subsequently to the receipt of the letter from Mr. Granger, namely, about May 1, 1895, he stopped at Colum-

## Bribery Charged in Ohio.

**Sensational Defeat of Commissioner McNeal—\$5,000 for an Attorney of the Commission—Acts as Attorney for Both Sides—Legislative Investigation—Two Gay Old Men Keep Bachelor's Hall—New York a Bad Place for Old Men to Visit.**

CINCINNATI, OHIO, March 20.—During the past two weeks much has happened in Ohio to make druggists, grocers and tradesmen engaged in kindred pursuits jubilant. The cause for this feeling of gratification, if such it may be termed, was the defeat of Dr. Francis B. McNeal for a renomination as State Food and Dairy Commissioner at the hands of the Republican State Convention, which was held in Columbus, last week.

Dr. McNeal has been looked upon as the arch enemy of druggists and grocers, and as a renomination by his party would be equivalent to election, the meaning of the above will be readily understood. The defeat of Dr. McNeal was accomplished in the second ballot at the State Convention, the Hon. J. E. Blackburn of Belmont County being chosen to succeed him. While the defeat of the Food and Dairy Commissioner is received with feelings of gratification in nearly all the towns and cities in Ohio, the fact cannot be gainsaid that the agricultural element—Dr. McNeal's stronghold—is in an entirely different frame of mind. The manner in which the food laws have been enforced in the city by Dr. McNeal's assistants has not met with popular favor, and for this reason the defeat of the head of the department was earnestly worked for. The druggists and grocers throughout the State worked at the polls and otherwise used the influence at their command to select delegates to the State Convention who pledged themselves not to vote for McNeal.

### CHARGE OF BRIBERY.

On the 6th inst. just before the State Convention charges of bribery against the department were published.

The publication of the charges caused a sensation throughout the Southern section of Ohio, and, while it was admitted that the news of the alleged bribery was made public at a most inopportune time for Dr. McNeal, the druggists were highly elated. In response to a telegram from Commissioner McNeal,

Judge Amos Dye, Prof. Charles T. P. Fennel and Assistant Commissioner Luebbing boarded an early train and hid themselves to Columbus. Officials connected with the department in other portions of Ohio did likewise, and when all had arrived in Columbus a consultation was held. The result of this talk was the following communication addressed to the General Assembly:

OFFICE DAIRY AND FOOD COMMISSIONER,  
COLUMBUS, OHIO, March 6, 1896.

TO THE GENERAL ASSEMBLY OF THE STATE OF OHIO: Publications appearing in yesterday's *Cleveland Leader* and to-day's *State Journal*, seek, by insinuation and innuendo, no name or fact being given, to attach obloquy, dishonor and corruption upon the department of which I am the head.

These publications, evidently inspired and paid for by persons hostile to the pure food laws of Ohio, are couched in such language as to render it impossible for me to obtain redress in the Courts. I believe that this matter is brought out just at this time for the purpose of injuring my prospects of renomination at the State Convention next week, and for no other purpose. The cowardly trick of putting out a charge, known to be false, at the last moment, is resorted to.

I hereby charge that this or any other insinuation of fraud or corruption in my administration of the Dairy and Food Department is infamously false and without foundation. In conclusion, believing that the people of Ohio are entitled to the fullest information with regard to the conduct of this department, which was created in their interest and is being run for their benefit, I hereby demand that your honorable body appoint such Committee of Investigation as will probe to the bottom not only the charges insinuated in the above named publications, but anything and everything connected with my office. Respectfully yours,

F. B. MCNEAL,  
Ohio Dairy and Food Commissioner.

### LEGISLATIVE ACTION.

When this communication reached the House that body was about to adjourn. Representative Deaton of Miami County asked for immediate action, declaring that the exigencies of the case demanded it.

Representative Hart of Lake County was against the resolution because it was vague, and moved that it be laid over until next week, when something definite could be ascertained. This was vigorously opposed. It was then proposed to amend the resolution by insert-

bus and saw Dr. McNeal, who said that he did not know anything about what Dr. Sterritt had said, but that he (McNeal) was running this department.

Continuing, the affidavit states that Mr. White went to Cincinnati and told Granger that he thought the reporter was mistaken about what Dr. Sterritt had said, and Granger said that he believed, not as he remembered, that Dr. Sterritt had told him (Granger) the same story. It was then decided to go out and see Sterritt. He called up the office of Dye & Dye, attorneys for the food department, to ascertain where Sterritt was. Judge Amos Dye answered the inquiry, saying that Sterritt was absent from the city, but that he (Dye) was controlling the department at Columbus and that he could attend to the matter as well as Sterritt. Dye was conferred with and told White that he had seen McNeal and a

#### SETTLEMENT COULD BE MADE.

Mr. White was called upon at the Grand Hotel the next day by Sterritt, Luebbing and Dye, who repeated the same statement concerning the proposed settlement. In order to conciliate and flatter McNeal they suggested that he change the label on Paskola, and also have the Cincinnati defendant plead guilty and pay a small fine.

White arranged to have this settlement made, and returned to New York, Dye promising to notify Granger that the case had been continued for a certain period. White received a telegram from his attorney saying the case had been set for trial. He thereupon went to the Merchants' Exchange National Bank in New York and drew a check for \$5,000, receiving \$5,000 in bills, the numbers of which were marked on the back of the check which was attached to the affidavit.

On returning to Cincinnati he went to a bedroom in the rear of Dye's office and "paid him the five one-thousand dollar bills." A plea of guilty was entered in the case in Cincinnati, \$25 fine paid and the prosecutions

#### CEASED FROM THAT TIME.

It was May 16, 1895, when the money was paid. The reading of the affidavit was accompanied by the presentation of correspondence between Judge Dye, Mr. White and others, which the attorneys of Mr. White alleged bore directly upon the alleged payment of the \$5,000, and the subsequent cessation of the prosecution instituted against his company.

#### JUDGE DYE TALKS.

Judge Dye took the floor and requested permission to make a statement. He then endeavored to explain all of the allegations of Mr. White. Entering a general denial of accepting the \$5,000, he related how the settlement had been effected.

He said that Mr. White agreed to make certain important changes in the manufacture and sale of Paskola which would enable the company to traffic in it in Ohio without a violation of the pure food laws. This agreement, he declared, was a perfectly legitimate one, and that there was no money consideration involved.

He was asked by Chairman Sullivan whether he had ever accepted or asked for any money from Mr. White. This question brought out admissions under a cross fire of questions that Judge Dye had acted as an attorney for Mr. White, and that he had received a retainer from him on one occasion of \$500.

"Were you not the attorney for Com-

missioner McNeal up to that time?" asked Mr. Sullivan.

"Yes, I was," replied Judge Dye.

"Well, how was it that you so quickly transferred your clientage?" asked the Senator.

"I did not transfer it," replied the Judge. "The fact is that I was the attorney for both of them."

In response to a question as to how he came to be employed by Mr. White, Judge Dye said: "Well, I had met Mr. White several times and I felt real friendly to him by this time. One day he was at my office at Cincinnati and happened to remark, 'Judge, your typewriter is a back number. I would like to present you with one. I am the president of a typewriter trust and can do it as well as not.' I replied that I did not know whether that would be right. Well, about a week after that I received the typewriter. It was a good one and has been used in my office ever since."

"Did you ever see Mr. White in New York?" asked the chairman.

"Yes, I visited him there."

"How did that happen?"

"Well, I thought it would be a pleasant thing to go to New York for a visit. I sat down and wrote to Mr. White, saying that I would like to take a trip to that city. He replied with an invitation for me to come at his expense and remain at least ten days, as his wife would be absent from the city, and that we would have a great time

#### KEEPING BACHELOR'S HALL.

I had never been to New York, and as I was getting to be a pretty old man I thought I would take the trip."

"New York is a bad place for old men; don't you think so?" interposed Senator Sullivan.

#### NEW YORK A BAD PLACE FOR AN OLD MAN.

"Yes, it's a bad place for an old man," rejoined the Judge.

"Well, did you have a good time in New York?"

"First class. Mr. White entertained me in elegant style."

"Did Dr. Sterritt get any money?"

"Not that I know of," was the Judge's reply.

Judge Dye continued at length, taking up the correspondence relative to the Paskola cases, and endeavoring to explain that he had no claim upon Mr. White at the time he was acting as the attorney for him, and that there had been nothing of a questionable nature between them. He denied that he had ever held a conference with Mr. White in his bedroom, and said that he had never talked to him at any time except when there were others present.

#### BRIBES OFFEN OFFERED.

Commissioner McNeal was the next speaker. He made an impassioned denial of the charges. While he understood that no effort would be made to connect him with the case, he believed it was intended as a reflection upon him to injure his candidacy for renomination on the eve of the State convention. In the course of his remarks concerning Mr. White's statement that he had been told that Dr. Sterritt could have the prosecution fixed with the department, he (McNeal) had never had any conversation with Sterritt regarding the matter.

Sterritt had told him on one occasion,

however, that White had come to the office of the Food Commissioner in the absence of McNeal, and, holding up a little card with \$10,000 printed upon it, had declared:

"I understand that it would not be difficult to control the department with that amount." Sterritt had replied that the department could not be controlled

#### WITH ANY AMOUNT.

The Commissioner declared that he desired the fullest kind of an investigation.

At the close of Dr. McNeal's remarks, Dr. Sterritt took the floor and entered a general denial to the charges. He said that Mr. White had never approached him in reference to a money consideration, except on the occasion when he came to the office and held up the card with \$10,000 on it. He said that he told him ten times that amount would not influence the department.

Deputy Luebbing of Cincinnati was the next to speak. He denied that he had ever written certain letters or any letters whatever to Mr. White that had been offered in evidence, and said that the charges were base fabrications. He had not held a conference with White at Cincinnati in May, 1895, at which it had been proposed to settle the Paskola cases for \$5,000, and had never heard of any such transaction before

#### THIS INVESTIGATION WAS SPRUNG.

"Do you know anything about certain chemists receiving fees of \$500 or some such amount?" asked Senator Sullivan.

Mr. Luebbing replied that he did. He told of several chemists receiving fees of large amounts for making false reports of analysis, and said that one chemist had radically changed his mind within a few hours after reporting certain impurities in Paskola. He named several Cincinnati chemists, but as he was not under oath at the time their names are not admissible as evidence here.

#### A. J. WHITE TESTIFIES.

A. J. White took the witness stand as soon as he arrived in Columbus and detailed the manner in which he claimed to have paid Judge Amos Dye, the attorney for the commission for the southern district of Ohio, five \$1,000 bills. He stated that the bills were marked and that the numbers were recorded at the Merchants' Exchange National Bank in New York. He stated that he offered Judge Dye a check, but that the latter demanded money, as he said he would have some difficulty in getting a check cashed.

After giving his testimony, Mr. White, who is 75 years old, was stricken with nervous prostration, and had to go to bed at the Neal House. The following day the attorneys for Mr. White asked Judge Dye to take the witness stand, but the latter would not do so as he said he did not want to testify until the case of the prosecution was fully presented. Judge Dye persisted in his refusal not to testify notwithstanding the requests of the attorneys for the prosecution for him to take the stand. Attorney Walter Granger took the witness stand and told of what dealings he had had with White while acting as counsel for the Paskola firm. He said that Mr. White had tried to tell him that he (White) had paid to have the prosecutions against Paskola stopped, but he (Granger) testified that he refused to listen to the name of the party to whom Mr. White said he paid



the money. He said, however, that he was led to believe that Judge Dye was the party meant by the New York man.

It is possible that the legislative inquiry will not be concluded for several days. If the charge against Dye is sustained an indictment may be returned against him. The outcome will be awaited with much interest all over the country.

#### WHO BLACKBURN IS.

Dairy and Food Commissioner Elect Blackburn is a member of the Legislature from Belmont County and was formerly a druggist at Bellaire, Ohio. He is well known by the members of the craft throughout Ohio, and it is expected that he will administer the affairs of his office in a satisfactory way. A short time before the State Convention he visited Cincinnati and talked with local druggists and grocers about the obnoxious laws as they are at present.

#### WARRANT FOR WHITE.

The following dispatch was sent out from Columbus on the 14th inst.: "Dairy and Food Commissioner McNeal and Attorney-General Minnett held a consultation and it was arranged to have a warrant sworn out for A. J. White of New York on a charge of bribing the *attachés* of McNeal's department. Dr. McNeal said he did not intend to let the investigation which has been started before the Legislature Committee be dropped, even if the other parties do so desire now that he has been defeated for renomination. Mr. Minnett said he was preparing a little club for Dr. McNeal."

#### SOMETHING ABOUT FEES.

COLUMBUS, OHIO, March 15.—The records of the Auditor of State's office show there have been some fees of large dimensions in the administration of the pure food laws. The records show that Senator W. T. Clark of Cleveland and his partner received nearly \$8,000 during the past 15 months and ex-Representative Amos Dye of Cincinnati received nearly \$4,000 for the same period as attorneys for the Food Commissioner's department. There were also other smaller fees to other attorneys, aggregating over \$5,000.

#### CHEMISTS' FEES.

The expert chemists who have assisted Dr. McNeal have not labored in vain, as will be seen by the following statement of fees paid them for one year:

November 18, 1895—G. A. Kirchmaier....	\$1,436.08
November 18, 1895—H. A. Weber, Col....	2,181.55
November 18, 1895—A. W. Smith.....	2,604.30
November 18, 1895—C. T. P. Fennel, Cin.	3,055.65
November 18, 1895—C. C. Howard.....	10.00

Total for one year..... \$9,287.58

#### An Ohio Senator Convicted of Bribery.

CINCINNATI, March 20.—One of the biggest sensations in recent years was caused throughout Ohio last week by the finding of a verdict of guilty in the charge of bribery against ex-Senator John Q. Abbott, of McConnellsville, Ohio. The gentleman named is the author of the present pharmacy law and he is a lawyer by profession. It was charged that Abbott solicited a bribe of \$200 from Elmore Black, a prominent druggist of Columbus. Ex-Senator Abbott was tried in the Criminal Court before the same jury

which heard charges of bribery against Senator William C. Gear, who was acquitted.

John Q. Abbott represented Washington, Noble and part of Morgan County in the Senate of the Seventy-first General Assembly. Attorney Henry A. Williams, of the counsel for the State, made the first statement of what the prosecution expected to prove. In substance he said that the pharmacy bill referred to was the measure which provided for issuing a pharmacist's license to physicians owning drug stores, and to other proprietors of such stores who had been in business for a certain number of years before the State Board of Pharmacy was created. This bill was introduced in the Legislature in January, 1894, and the indictment charged that in April Senator Abbott solicited a bribe of \$200 from Elmore Black, a druggist who was at that time in business in Columbus, but who has since retired. Mr. Williams claimed that Abbott represented to Black that the enemies of the bill were raising money to defeat the measure and that the friends of the measure would have to do the same. Hon. Emmet Tompkins, the attorney for the defendant, stated that Abbott had been guilty of nothing save over zealousness in the interests of his own bill. He had worked faithfully in behalf of the bill, spending his own money and devoting all his time to its interests. Whatever was said to Mr. Black was merely for the purpose of urging the friends of the measure to stand more firmly together in order that it might not be defeated.

Elmore E. Black stated that in 1893-94 he operated a drug store. Witness stated that he became acquainted with Senator Abbott in 1893. Black stated that the reason that he is not now in the drug business is because he is debarred from filling prescriptions by the pharmacy law. He said that while the pharmacy law was pending he met Senator Abbott in the Senate Chamber.

Abbott stated to him that the opposition to the bill was raising money to defeat it and he asked the witness if he could not secure about \$200 to be used in fighting them. Subsequently witness had secured about \$65 to be used for such a purpose. Black stated that he afterward saw Senator Abbott, who asked him for the money he had collected, but he refused to turn it over until the bill had passed. The bill did not pass, and the next time he saw Abbott was after the Grand Jury had met and returned an indictment against Abbott. The witness stated that Abbott called at his office and asked him if he had testified against him before the Grand Jury. During the conversation Abbott told him that he ought to be very careful or he might have him indicted after the term of the present prosecutor expired.

Some of the testimony given by J. B. Price, a druggist of Lancaster, bordered upon the sensational. He stated that on several occasions he visited Columbus in the interest of the pharmacy measure and had several conferences with Abbott. Mr. Price stated that Mr. Abbott had said that if they could get Hon. Charles P. Griffin of Toledo he would be a good man, but it would take \$150 or \$200 to get him to make a speech. Abbott thought that if his support could only be secured in favor of the bill he would be just the man to make the presentation speech on the floor of the House.

Relative to the amount of money necessary for the favorable consideration of the bill, Abbott had said that about \$1,000 must be raised, but witness was only able to raise \$500. This money was to be paid when the bill was passed and Price was a registered pharmacist.

Abbott wanted the money turned over to him, as he could handle it with greater advantage. They had a conversation and it was agreed that Abbott should put the money to the proper uses. Other persons besides Griffin had been named to help the measure through, but witness did not recall their names. Price stated that after the defeat of the measure he returned the money to the persons contributing to the fund.

Hon. Emmet Tompkins subjected Price to a severe and exhaustive cross examination lasting about three hours and a half. Price admitted the fact of his having been arrested at one time for a violation of the pharmacy laws regarding the filling of prescriptions. During his examination the witness stated that Abbott had some money of his own which he was to use, and the rest of the money was to be paid after the passage of the bill. Witness claimed that he did not think a cent of the money was to be improperly applied; that is, for the purpose of bribing legislators. Abbott, he thought, had no intention of corrupting members of the House.

After the evidence had all been heard and the opposing counsel had spoken, the jury retired and remained out all night. At an early hour word was sent in that a verdict had been agreed upon. Senator Abbott was notified at his hotel and came to the court room. The court officers all arrived and the announcement was made that a verdict of guilty had been rendered. In the absence of his attorney, ex-Senator Abbott, who is himself an attorney, polled the jury in order to ascertain if the verdict was that of every individual member of the body. Abbott seemed greatly worried over the verdict and talked freely about the matter.

"If asking for \$15 to pay the expenses of Gen. Charles H. Grosvenor to come to Columbus and talk in favor of the pharmacy bill is bribery, then I am guilty," said he. "If I am guilty of bribery, then half the members of the Legislature ought to be in the penitentiary."

After some little scurrying around the friends of Abbott secured a bail bond for him and he was released from custody. Notice of appeal was given and the case will be fought to the highest legal notch.

#### The Mississippi Board of Pharmaceutical Examiners.

Governor McLaurin has appointed the following as members of this board, to serve the four years beginning January 1, 1896: Geo. F. Moore, Jackson; J. C. Means, Natchez; W. B. Harrington, Vicksburg; Rob't Henderson, Corinth; Jno. K. Webb, McComb.

All of the above are new members except Mr. Means, who has been secretary of the board since its organization. The board will hold a meeting in Jackson on Tuesday, April 7, when permanent organization will be effected and officers elected. The regular semi-annual examination will also be held on April 7.

Several bills for the amendment of the pharmacy law—some good and others evil—are now before the Legislature. It is probable, however, that the body will adjourn without acting on any of them.

## New York College of Pharmacy

**Proposed Changes in the By-Laws Not Adopted—Discussion on Their Adoption—Officers Elected for the Ensuing Year—Report From the Committee on Scientific Papers—Presentation to Mr. Fairchild, the Retiring President—Presentation Speech by Wm. M. Massey.**

**I**NTEREST in the annual meetings of the New York College of Pharmacy usually centers in the election of officers to serve during the ensuing year. At the annual meeting which took place in the College of Pharmacy Building, 115 West Sixty-eighth street, on Tuesday evening, March 17, interest in the election of officers was quite overshadowed by the attention given by the members to certain proposed amendments to the by laws of the college. As told in previous issues of this journal the Committee on By-Laws were prepared to submit a report, presenting in detail the changes it was proposed to make in the existing by-laws. It was evident from the opening of the meeting that considerable opposition existed against certain of the changes proposed, and while all went smoothly during the consideration of certain amendments to Article 1, opposition of a most decided character developed during the discussion of the adoption of Section XII., Article 2, and a vote adverse to the adoption of the change proposed in this section was rendered by the members. This proved a signal defeat for the committee, which, explaining, through Chairman Atwood, that the whole of the remaining emendations and additions to the by-laws hinged on the adoption of the objectionable clause, asked that the amendments be referred back to the committee to be revised and resubmitted at an adjourned meeting of the college which President Fairchild called for Tuesday, March 24. The election of officers followed with the result given below. After this came an interesting ceremony in the presentation to Samuel W. Fairchild on his retirement from the office of president of a magnificent bronze figure of Diana. The presentation was a complete surprise to Mr. Fairchild, as he had had no inkling of any intention on the part of the members to remember him in this way. The figure, covered by a cloth, was in full view of the members during the entire evening, but Mr. Fairchild, as he said in his speech of thanks, took it for a piece of chemical apparatus or some appliance of the teacher who had been using the lecture hall during the day. It can readily be understood that the gift was not the less keenly appreciated on this account, and Mr. Fairchild was considerably affected by the words of Mr. Massey who made the presentation speech. The bronze, which is a masterpiece of Roulard, a famous French artist, won the highest prize at the Exhibition of the French Academy of Fine Arts in Paris three years ago. Our half tone engraving, which is reproduced from a photograph taken expressly for the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD by See & Epler, 292 Fifth avenue, conveys but an inadequate idea of its exquisite workmanship. The figure itself is mounted on a rich Sienna marble base, and is supported by a pedestal of Mexican onyx finished in the highest grade of art. The statue was selected by a committee, of which Albert Plaut was the chairman, and it must have been very gratifying to that gentleman and his associates on the committee to witness the unaffected admiration which the handsome work evoked. The statue was imported direct from France by the well-known Fifth avenue firm of Camerden & Forster.

**T**HE meeting opened at 8.30 p. m. with President Fairchild in the chair, facing what was perhaps one of the most representative gatherings of pharmacists ever held in the new college building. All of the officers and trustees and a few members of the faculty were present.

The reading of the minutes of the previous meeting were dispensed with on motion. Reports of committees were called for, and Chairman Atwood responded for the Committee on By-Laws.

Discussion was invited, and the first objection came from Geo. Massey, who thought well of the proposed amendments but considered that the time selected for making them was inopportune. He moved that the whole matter be laid on the table. Mr. Seabury seconded the motion, and a long discussion followed which was led off by Mr. Atwood, who recited the formation of the committee, and the objects of the proposed changes. The speakers were beginning to drift

away from the question, which was on the adoption or rejection of Mr. Massey's motion to table the report of the committee, when Mr. Macmahon sharply called attention to the fact that they were not discussing the motion before the meeting. President Fairchild thereupon put the motion to a vote, which resulted in the rejection of Mr. Massey's motion.

The first amendment, relating to a trivial change in the phraseology of Sec. 2 of Article 1 relating to the election of hon-



DIANA—BRONZE BY ROULARD.  
Presented to S. W. Fairchild, the Retiring President.

orary members was then taken up, and approved of without debate. The remainder of the changes in Article I submitted for adoption by the committee being largely of the same character, Dr. Rice moved that Article I be adopted as a whole without further discussion, and this course was accordingly taken.

Discussion on the adoption of Sec. 12 was then entered into, and many objections to the proposed change were ventilated. Geo. Massey objected to the omission of the words in italics which read: "The officers of the college shall be the officers of the Board of Trustees." He entered an earnest protest against the proposed change, and asked how it would look to invite the officers of the college to attend meetings and take from them all of the executive functions of their office. This view was also shared by Mr. Seabury, who said he had "a soft and lovely glow for the sentiments expressed by Mr. Massey." He waxed caustic and sarcastic in his references to the present Board of Trustees, and was sharply called to order by Mr. Fraser. Mr. Fraser's point was not well taken, however, and Mr. Seabury continued. He expressed his utter disapproval of the conditions embodied in the proposed change, and characterized them as "measley" and calculated to make a figurehead of the president. Ex President Ewen MacIntyre also spoke in opposition to the amendment. He expressed the hope that the members would hesitate before adopting the resolutions. A society, he said, was never strengthened by ornamental officers, and it would be far preferable to retain the existing arrangement.

Dr. Rice spoke for the committee. He said he hoped that no member present had any idea that the amendment was included for any reason other than the best interests of the college. The provision for the selection of a chairman of the Board of Trustees from among its members was put in merely as a contingency, and would not necessarily interfere with the election of the president as chairman of the Board of Trustees. So long as the president was willing to accept the office of chairman of the Board of Trustees, and act in that capacity no one could object.

Wm. M. Massey could not agree with Dr. Rice, and said he would like to ask what the duties of the president would consist of, beyond presiding at commencements in the Music Hall. Replies to this were made by Messrs. Seabury and Macmahon, but the best explanation of the proposed amendments came from Mr. Atwood, who asked that the committee be given credit for its sincerity in its work. The by laws had not been framed to suit the needs of any particular man; they were made for the college and personal references should be avoided.

Albert Plaut agreed with Mr. Atwood that the changes would redound to the benefit of the college. The main question was as to whether they were opportune. Mr. Massey had, in his opinion, stated the case exactly in his remarks.

Geo. B. Wray was then heard. He said the changes embodied in the new by-laws had been known to him about a year, and long before it was known that Mr. Fairchild would resign. He entered into a long and carefully thought-out discussion of the changes contemplated, and made a strong argument in support of the amendments.

Geo. Massey moved that the amendment under discussion be referred to a special committee for consideration, but Dr. Rice objected saying that it would be

unwise to defer the matter to a special meeting, as they had a larger representation of the members there that night than they would be likely to have at an adjourned meeting. The question as to the adoption of the amendment was finally put to a vote and the members decided against it. Being thus defeated on a vital point, the Committee on By-Laws asked that the whole matter be referred back, to come up for discussion again at an adjourned meeting on March 24.

The next business was the election of officers. Tellers were appointed as follows: T. H. Sherwood, F. G. Carter and

responded with the following statement of suggestions and recommendations:

#### RESOLUTIONS BY THE COMMITTEE ON SCIENTIFIC PAPERS.

It was unanimously resolved that the committee should recommend that scientific papers be presented at the college meetings; that there should be a standing committee intrusted with the duty of arranging in advance for the presentation of three papers, communicating the programme to the society in time for announcement in the meeting notice, for editing the papers and furnishing copies to the pharmaceutical journals of the country. It was decided that it was not feasible to inaugurate the plan at the next meeting of the college.

That papers be divided into two classes:

A—Those of special value for publication, but



EDWARD KEMP, PRESIDENT-ELECT OF THE COLLEGE OF PHARMACY OF THE CITY OF NEW YORK.

W. H. Ebbitt. Balloting was then commenced with the following result:

#### Officers of the College.

PRESIDENT: Edward Kemp.

VICE-PRESIDENTS: Charles F. Chandler; John R. Caswell; Gustavus Rammsperger.

TREASURER: Herbert D. Robbins.

SECRETARY: Alfred H. Mason; Assistant Secretary: O. J. Griffin.

TRUSTEES: Clarence O. Bigelow, Samuel W. Fairchild, George Massey, Ernest Molwitz, Reuben R. Smith, Horatio N. Fraser, Charles S. Erb.

Before adjourning President Fairchild called for a report from the Committee on Scientific Papers, and Professor Rusby

of slight interest, and to be read by title or abstract only.

B—Those of general interest, to be read and discussed.

Provision should also be made for the informal presentation of notes, abstracts and specimens.

It would be advisable for some member of the proposed committee to prepare a list of members of the college willing and capable of providing papers occasionally at these meetings, and for another member to prepare a similar list of such members of the Alumni Association.

Professor Rusby also suggested that the Alumni Association be requested to consider the advisability of arranging to hold their meetings on the same evening as the college meeting.

President Fairchild was, on motion, empowered to appoint the Committee on Scientific Papers.

Secretary Mason read memorials to the Park Commissioners and the Board of Health presented by a member asking that the work on the small parks in that section be pushed to completion.

H. W. Atwood made a strong plea for an extension of interest by the members in the college students. It was necessary in view of the probable extension of college hours, he said, to enlist the active support of the members. He asked them whenever possible to choose their help from among the students of the college.

Albert Plant instanced the success of the students in passing the examination of the City Board of Pharmacy, and before concluding his remarks called the attention of the president to the fact that Herbert D. Robbins, the newly-elected treasurer of the college, was in the hall, and the members would probably like to hear from him.

Mr. Robbins being called upon responded very graciously. He said he appreciated most sensibly the honor that had been conferred upon him. He paid a tribute to the ability of the retiring treasurer, and only hoped that he would be able to follow worthily in the footsteps of Mr. Fraser.

Edward Kemp, the president elect, was then announced, and his entrance on the platform was the signal for cheers and handclapping. He was introduced to the members by Mr. Fairchild, who referred in a felicitous manner to the great interest which Mr. Kemp had always evinced in the work of the college.

Mr. Kemp acknowledged the honor implied in his election to the office of president in a few well-chosen words, and the regular proceedings terminated.

The full programme of the evening was not exhausted, however, and when a motion to adjourn was made, and no one adjourned, President Fairchild looked mystified. It was at this moment that Wm. M. Massey advanced to the front of the platform and, facing Mr. Fairchild, made the following presentation speech, the cloth covering the statue being removed meanwhile by Mr. Plant:

#### Presentation Speech by Wm. M. Massey.

When, some six years ago, you were unanimously invited to accept the presidency of this the oldest college of pharmacy in the United States, some of our members were apprehensive you were rather young to properly discharge the duties of such an important office.

Certainly, many thought it a formidable task for a young man to attempt to fill efficiently a chair which had been so ably occupied by your predecessors.

Others, again, dreaded for you the responsibility attaching to the office of president at the particular time when it seemed imperative to move from the old college building and undertake the building of a new college building on an extensive and costly scale.

Those who knew you intimately, however, had little fear of your ability. They had watched your career closely and knew you had the qualities which have commanded success in all countries and in all ages—energy, patience, courage, combined with rare good temper.

The justification of our confidence is this occasion to-night, when we all bear testimony that you have shown in an eminent degree during the trying times of the past six years that you possess these great qualities.

During that period of time there have been occasions when difference of opinion arose among the trustees and among the members of the college, as to the course pursued in the inception and the carrying to completion of this splendid building devoted to science and learning.

Debates resulted and divisions were taken, but it will be one of your pleasantest recollections that the beaten minority always supported you quite as warmly as the triumphant majority. This fact in itself speaks volumes for the sincere regard in which you were held by all your fellow members.

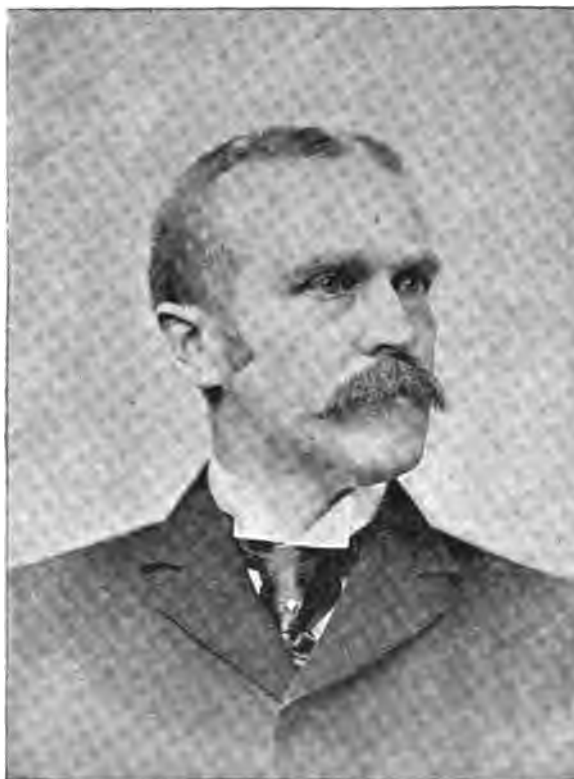
During your presidency, that grim enemy of us all, Death, has been busy in our ranks, carrying off our oldest member, Geo. C. Close, Oscar Kress and others. Never again shall be seen in this hall the genial, aristocratic face of J. Niven Hegeman.

On the other hand, our college has

It adds to our pleasure that your good parents, your wife and children, your sisters and brothers, will appreciate this compliment to you quite as much as you will yourself.

And when, in the fullness of time, you join the great majority, this work of art will remain to remind the surviving members of your family that their loved one was esteemed and honored by his friends and associates in the College of Pharmacy of the City of New York. Who can tell how great a stimulus it will prove to them to endeavor to follow in your footsteps?

Mr. Fairchild was completely taken by surprise, and confessed to an utter inability to make fitting acknowledgment of the eulogistic remarks of the representative of the presentation committee. He thanked the members most heartily for the evidence of good-will and esteem which they had shown him, and this con-



SAMUEL W. FAIRCHILD, RETIRING PRESIDENT OF THE NEW YORK COLLEGE OF PHARMACY.

greatly gained by its new presiding officer, professors, and the membership of such experienced, resolute men as Mr. Mason, Mr. Plant and Mr. Bigelow. Long may they live to carry on the good work.

In retiring from the presidency, it must be very gratifying to you to know that your mantle will fall on the shoulders of one of our merchant princes—self-made, energetic, ambitious; one who has never known defeat, and who is generous to a fault. In his hands, I am sure you feel the interests of our cherished institution will not suffer.

And now, sir, in the name of the Presentation Committee, the Board of Trustees and the members of the college, we ask your acceptance of this token of our high regard.

This will always be to you a tangible illustration of work well done, and thoroughly appreciated by those benefitted.

cluded what was a very pleasing and interesting ceremony.

This terminated the proceedings, and the meeting adjourned.

#### Meeting of the Kings County Pharmaceutical Society.

The regular monthly meeting of the Kings County Pharmaceutical Society was held at the college on Franklin avenue, on Tuesday afternoon, March 10, with President Pamphilon in the chair.

On convening the meeting the regular order of business was dispensed with, and Chas. E. Parker, Ph. C., was invited to address the society, and Mr. Parker read a paper bearing the title, "Some Aspects of Technical Pharmacy," which is printed elsewhere in this issue.

At the conclusion of the paper the

thanks of the association were extended to the author for his paper.

The minutes of the previous meetings were read and approved.

The name of one new applicant for membership was read and referred, and three new members were elected to membership.

#### A VISIT TO T. C. PLATT.

A. Paradis reported on behalf of the legislative committee that this committee had interviewed Mr. Platt, who was at first inclined to be frigid and intimated that he was not running the New York Legislature. He was told, however, that he had mistaken the character of the visit, that he was merely approached as a fellow druggist who could sympathize with the position of the pharmacist. He thereupon became somewhat more cordial, and promised to present the druggists' view of the matter to Mr. Raines with whom he was acquainted.

#### THE DEGREE OF DOCTOR OF PHARMACY.

The trustees of the college had approved of the bill for the conferring the degree of Doctor of Pharmacy, but had recommended the addition of an amendment specifying that the degree be conferred only after a six months' post-graduate course of study.

It was moved that the action of the board of trustees be approved. This was opposed by Mr. Muir on the ground that the introduction of the amendments would jeopardize the passage of the bill, as it had been stated to him very positively by Mr. Wilson, who introduced the bill, as well as by other experienced legislators.

Mr. De Forrest stated that the speaker was not wholly correct in so far that the bill was not read when the subject was introduced in the society, its general provisions only being stated. He therefore urged that the amendments be adopted, "for the purpose of putting it out of the power of this board whom we do trust, or of any future board of trustees whom we may not trust" to make any misuse of the privilege of granting this degree. He also stated that the introducer of this measure had himself stated that it was intended to enable the college to confer the degree as an honorary degree, and while he had since withdrawn this statement on the grounds that it had been made inadvisably and without sufficient consideration of the manner in which it would be construed, the impression made could not be wholly removed.

Mr. Muir vigorously opposed the adoption of the amendment, and denied the charge which he said had been made that he was desirous of obtaining the honorary degree for himself. He would never accept it in this way.

Professor Anderson stated that the question to be decided was whether the society wanted the privilege of conferring the degree or not. If the amendment is insisted on the bill will not be passed.

The discussion between Messrs. Muir and De Forrest became very animated, and during its progress the fact came out that Dr. Bartley had taken part in the drafting of the amendment which restricted the power of the trustees as to the conferring of the degree. Mr. Muir stated that, notwithstanding this fact, upon going to Albany and hearing the way matters stood and reading the original bill, Dr. Bartley had given his emphatic approval to the original bill. Mr. Muir further argued that the action of the

trustees was a mere informal vote, showing "the sense of the board" upon the subject, and he was of the opinion that that "sense" had since changed so that if a vote were taken the board itself would not indorse the amendments.

Mr. Muir asked if the trustees before voting in favor of the amendment had studied this portion of the charter of the New York College. He said that their charter was devoid of any restriction whatever on the granting of degrees. There were graduates of the New York College who had gone elsewhere and became teachers, had made distinct advances in pharmacy, and it was only just that these men be awarded the degree as an honorary degree.

But the amendment to the Brooklyn Charter was not as loosely drawn as that of the New York College.

The fact that the New York College had a big building saddled by a big debt was not, said Mr. Muir, any reason for its members to be proud, but it was a very important reason why they should secure all the fees possible, and one way of adding to the fees would be to shut out any other college from conferring the degree of Doctor of Pharmacy. Furthermore, the opposition on the part of the New York College was most marked on the part of those members who had been most instrumental in saddling the college with a big debt and who were, in a measure, responsible for its payment.

#### OPPOSED THE MEASURE.

John Gallagher of the Legislative Committee opposed the measure vigorously, though tersely, on the general ground that there were enough degrees without adding to them, that Ph.G. was good enough if it was made good by giving to its bearers the proper kind of qualifications, and he thought that in seeking to confer the degree of doctor the college was simply making itself ridiculous.

The motion to approve of the vote of the trustees favoring the introduction of the restrictions on the granting of the degree was put and lost, and on motion the college reaffirmed the resolution passed at the last meeting of the college, favoring the bill granting the college the right to confer the degree of Doctor of Pharmacy. At the request of Assemblyman Wilson, Dr. Brundage was added to the committee to attend the hearing on March 11.

#### THE RAINES BILL CONDEMNED.

The Raines bill was discussed at some length and its various objectionable features were pointed out. Mr. Paradis offered a resolution to the effect that the society was strenuously opposed to that portion of the bill which exacted a license fee of \$75 from the pharmacists of Brooklyn merely for the privilege of dispensing liquors on prescription, and on passing this resolution the society adjourned.

#### Hearing on the Doctor of Pharmacy Bill.

On March 11 the opponents to the passage of the bill empowering the Brooklyn College to grant the degree of Doctor of Pharmacy were granted a hearing before the Assembly Committee at Albany.

#### THE NEW YORK COLLEGE AS REMONSTRANTS.

Six representatives of the College of Pharmacy of the City of New York were

present. Herman W. Atwood, chairman of the Lecture Committee of the New York College of Pharmacy, said:

Our college has been established many years. We have built up a magnificent institution. Our several departments are thoroughly equipped, and at the head of our institution is the Dean of the School of Mines of New York City. We pride ourselves on the provisions we make for our students. We do not feel that the Brooklyn College of Pharmacy is old enough or sufficiently advanced or developed to give the post graduate courses, and we are here to oppose the privilege being granted it.

Mr. Wray, a member of the Examining Committee of the college, said that he did not believe the Brooklyn College sufficiently equipped. He declared that he was not willing to see the right given to the Brooklyn College, but advanced no particular arguments. When asked if he had ever visited the Brooklyn College of Pharmacy, and if he knew the members of its faculty, he said he had not and did not. He said he did not even reside in New York City, but lived in Yonkers. He admitted that he was not well up in the history of his own college.

Dr. Smith E. Jelliffe, also of the New York College of Pharmacy, stated that he had been an instructor in the Brooklyn College of Pharmacy, and was opposed to that institution conferring the degree of Doctor of Pharmacy. He made several charges against the Brooklyn College.

C. O. Bigelow stated that the building of the New York College cost between \$150,000 and \$200,000; that it was the best of its kind in the world. He said he was opposed to the bill.

T. J. Macmahon took the same stand.

#### THE BROOKLYN COLLEGE PRESENTS ITS SIDE OF THE CASE.

Dr. Elias H. Bartley, Dean of the Brooklyn College of Pharmacy, was introduced by William Muir, chairman of its Lecture Committee. He said:

I am surprised at the remarks of the representatives of our sister college. I shall not answer the charge made by them, but shall leave that duty to Dr. Albert H. Brundage and William Muir. They will have something to say as to our equipment and the standing of the faculty of the Brooklyn College of Pharmacy. As to Dr. Jelliffe, it is true that he taught in the Brooklyn College for one year. At the end of that year he was not asked to continue.

He said further that Dr. Jelliffe had said that the Brooklyn College furnished less than half the instruction that was provided by the New York College, when, as a matter of fact, the Brooklyn institution gave and required more. In proof, Dr. Bartley presented announcements and schedules of the two colleges. He said that his college did not have a debt of \$125,000 to carry, as the New York College did; and that it had not been forced to appeal to the public at its last commencement for aid to carry it through the summer, as had the New York College.

Professor Anderson endorsed this last statement when Mr. Bigelow attempted to deny its truth.

Dr. Bartley closed by saying that one of the examiners of the State Board of an adjoining State had written him to the effect that the graduates of the Brooklyn College of Pharmacy stood higher in examinations before his Board than those of the New York College, or of any other college.

Dr. Albert H. Brundage, a trustee and ex-president of the Brooklyn College of Pharmacy, said:

I attribute the vigorous opposition encountered to an ignorance of the equipment and condition of the Brooklyn College.



He then gave an outline of its history, with full details as to its growth. He called attention to the fact that the corps of teachers consisted of 15 men; that the Dean of the Faculty, Dr. Bartley, was a professor in the Long Island Medical College, and was a gentleman who had held many positions of trust and importance both in this city and elsewhere; that he was a member of many prominent and conservative organizations, and the author of a widely used work on chemistry. He spoke of Prof. Henry W. Schimpf, and mentioned his work on "Volumetric Analysis," which is in use in several institutions of learning. Dr. Brundage also spoke of Prof. W. C. Anderson and Prof. A. P. Lohmoss, both of the Faculty of the Brooklyn College of Pharmacy.

William Muir, in the course of his remarks on the bill, bore out Dr. Brundage's defense of the Faculty and equipment of the college.

#### THE BILL PASSED.

On the day following the hearing, the Assembly Committee reported the bill favorably and it has since passed the Assembly, and there is every probability of its becoming a law.

In our last issue reference was made to the introduction into the New York Legislature of a bill setting up certain requirements for the granting of the degree of Doctor of Pharmacy, and the statement was made that the bill was introduced by some one with a grievance against the Brooklyn College. Upon further investigation this statement proves to be erroneous, as the introducer of the bill has aided the institution by a gift of money and otherwise since severing his connection with it. The aim in introducing the bill seems to have been purely to further the cause of pharmaceutical education.

on the exterior of his pharmacy at 18 Seventh avenue. Mr. Osmun decided long ago to fight the cutter with his own weapons, and he is the owner of several successful proprietary remedies.

Receiver John R. Hardin of the Crescent Drug Company, Newark, N. J., has prepared an account and moved for a settlement of the company's affairs. He has on hand a balance of \$13,222.40 to be paid to creditors; owed, \$42,988.13. The sum of \$2,652.68 has already been paid to preferred creditors.

Brooklyn druggists are expressing considerable surprise over the mysterious disappearance of Wilhelm C. Wagner, formerly well known as the proprietor of several drug stores in the city, the last at Atlantic and Bedford avenues, which he had disposed of at a loss. It is believed that the missing man has gone to Germany.

## IN GREATER NEW YORK.

New York, Brooklyn, Jersey City and Vicinity.

H. Mayerhofer has disposed of his pharmacy at Eleventh street and First avenue to H. B. Otto.

Benjamin Robinson, the New Rochelle druggist, is about to move from Trinity street to 14 Haskell place.

Clifford C. Simpson, a drug clerk employed by C. G. Bacon & Co., committed suicide in Newark, N. J., on March 11, by swallowing morphine pills.

The New York City Board of Pharmacy has successfully prosecuted some Chinese grocery men for selling opium without a license.

J. T. Tengelson has sold his pharmacy at 447 Hicks street, Brooklyn, to Leo Weinstein, who has lately conducted a successful pharmacy in Astoria.

Ira Belfry, class of '94, N. Y. C. P., formerly with C. F. Hanson, 244 Sixth avenue, is now clerking for Dougan & Merrit of 37 Columbus avenue.

James Brough, who clerked for some time with Daggett & Ramsdell in their Fifth avenue store, is now with Bartlett & Plummer, at 561 Fifth avenue.

The partnership formerly existing between Griffin & Lent, Peekskill, has been dissolved, and Fred Lent will assume the entire management of the business.

George E. Tappenden, the druggist at the corner of Sixty-fourth street and Columbus avenue, is mourning the death of his father, who passed away last week, at Ithaca, N. Y.

Thomas Smiley, formerly with Reeder Bros., 480 Fourth avenue, is now with Eimer & Amend, Eighteenth street and Third avenue.

Dr. H. B. Andrews has opened a new pharmacy in the Babbitt Building, Morristown, which makes the eighth store in that town to a population of 10,000.

The firm of Looney & Tuska, Morristown, N. J., have dissolved partnership by mutual consent. The business will be carried on by E. J. Looney, who also has the books for settlement.

We are informed that the partnership existing between Daggett & Ramsdell, the well known Fifth avenue druggists,

has been dissolved, Mr. Ramsdell's interest having been purchased by J. J. O'Neill, formerly of 468 Hudson street.

A neat and well designed pharmacy has been opened at Murray Hill, Flushing, by F. M. Laurence, formerly of 134 Bedford avenue, Brooklyn. Mr. Laurence is a graduate of the New York College of Pharmacy, class of '98.

The well-known drug store in the Sun Building, which has been occupied by Dr. Charles J. Perry for ten years, is to be vacated on May 1, when Dr. Perry will remove his stock and fixtures to the World Building.

Geo. Klippert, son of the senior partner of the drug firm of Klippert & Co., at 844 Columbus avenue, was severely burned on the face, neck and hands a few days ago by the forcible explosion of some carbolic acid which he was melting over a stove.

Judge MacLean of the Supreme Court last week dissolved the Berri Pharmacy, this city, and made the temporary receiver, Stephen W. Linington, permanent receiver. The expense of fitting up the place was \$5,377, and the assets are valued by the receiver at \$673.

Lowe Brothers, formerly of 142 First street, Elizabeth, N. J., have sold their pharmacy there to J. L. Lewes, formerly with P. B. Knapp & Son of this city, and have opened a new pharmacy at Eighty-eighth street and the Boulevard, New York.

John J. Strausser, a well-known Trenton, N. J., druggist, has purchased a piece of property opposite his present location, corner of Pennington avenue, on which he will build a new and modern pharmacy. He expects to open up about April 15.

The pharmacy of Geo. B. Foster, at 129th street and Lenox avenue, this city, was broken into recently by burglars, who made away with the contents of Mr. Foster's private desk and several boxes of cigars. No trace of the burglars has yet been found.

C. A. Osmun, ex-president of the Interstate Retail Druggists' League, is about to make some extensive alterations

The many friends of Geo. Stevenson, the Hudson avenue, Brooklyn, druggist, who was arrested on February 29 last, charged with having sold carbolic acid to a child, in violation of the law, will be glad to know that the case has been dismissed. The child's father took the poison with suicidal intent and died from its effects.

The apothecary's shop at Bellevue Hospital is a queer dingy little place, located in the hospital proper, and quite distinct from the laboratories of the general drug department, on another part of the grounds. The present apothecary is Martin O'Connor, who fills the position with marked ability. As the office is somewhat of a political one, and requires influence of this kind to obtain it, it is freely rumored that Mr. O'Connor will shortly have to make way for an apothecary more congenial to the Reform commissioners.

The recent severe weather has had no very appreciable effect upon the number of visiting druggists and out-of-town buyers. Among others in the market during the past fortnight we noticed the following: Thomas A. Hedley, representing Evans Sons & Co., Liverpool, Eng., and Montreal, Can.; S. E. Strong, Strong, Cobb & Co., Cleveland; Louis Dohme, Sharp & Dohme; Thomas D. Condie, Mallinckrodt Chemical Works, St. Louis; Chas. S. Ruckstuhl, St. Louis; Theo. Dench, St. Louis; W. H. Leonard, Tarrytown; James R. Robinson, Memphis; B. Douglas and W. Sault, Middlesex Witchhazel Company, East Haddam, Conn.

Many of the older New York druggists will learn with regret of the death of Henry Klein of Henry Klein & Co., 44 Cortlandt street. He died on Sunday, March 15, after an illness of several weeks. Mr. Klein was about 69 years of age, and was long identified with the wholesale drug trade of this city. His first experience was gained with the firm of Wm. Barclay & Co., which was succeeded in 1872 by Klein, Fleet & Co., and later by that of the firm bearing his name. He was one of the best known men in the Ninth Ward, and was an intimate friend of Chas. Crittenton. He was a confirmed old bachelor.

J. L. Hopkins & Co., the well-known drug dealers of 86 John street, had a fire on their premises last Tuesday, and the stock and machinery of the firm were more or less seriously damaged, while

the office was completely gutted. The firemen were successful in confining the fire to the second floor. Adolph W. Weismann, one of the oldest and best-known residents of Hoboken, died March 10. Until a year ago he was proprietor of the drug store now owned by his two sons on Bergenline avenue, Union Hill. He is survived by four children.

The druggists of New Jersey are very much aroused over a bill introduced in the State Legislature to compel the State Board of Pharmacy to issue assistants' certificates without examination to persons who have had 11 years' practical experience in a drug store. The State Pharmaceutical Association is opposing the bill on the ground that the bill, should it get on the statute book, would break down every barrier which the law now imposes between competency and incompetency in the practice of pharmacy.

The many friends of Ferdinand Lascar, the well-known pharmaceutical journalist, will be sorry to learn of his prostration by illness. He is afflicted with a severe form of Bright's disease, and much anxiety has been expressed over his condition. His position as apothecary to the Demilt Dispensary, which he has held for the past ten years, is being filled temporarily by Willis O. Davis, who was formerly apothecary to the New York Polyclinic Dispensary. Dr. Stafford, who is chief apothecary of the Demilt Dispensary, is keeping the position open for Mr. Lascar in the hope of his recovery.

Suit was brought recently against Herman G. Augustus Goll, a druggist at 19 Tompkins avenue, Brooklyn, to recover \$1,000 for alleged malpractice, through Wm. Pollock, a clerk in the store. The plaintiff, a Mrs. Richardson, broke her right arm near the wrist on August 1, 1894, and called on the drug clerk for relief. According to the evidence brought forward, the clerk did not discover that her wrist was broken, and sold her a bottle of liniment for 10 cents for what was presumed to be a bruise. The suit did not go to the jury and was discontinued on technical grounds. The defendant is the president of the German Pharmaceutical Society of Kings County.

Prof. H. H. Rusby of the New York College of Pharmacy has obtained leave of absence, and will shortly take his departure for Venezuela as official botanist to the Orinoco Mining & Colonizing Company. The company holds a sub-lease on nearly 10,000,000 acres under the much talked of Manoa Company, which received its grant from the Venezuelan Government some years ago. The party of which Professor Rusby is a member will land at Port of Spain, and possibly visit the island of Peraulles, which the company owns; then go up the Orinoco in their steam launch to Barancas. From Barancas the party will go up one of the unknown rivers toward the mountains, leave the launch, and with Indian guides strike off on foot for the Xmatata Mountains, noting the soil, timber and ore deposits. Two physicians will accompany the expedition in addition to Professor Rusby.

H. J. Moore of Hammondsport has recently moved into the new Union Block. He has a very handsome store, the fixtures being of quartered oak. The show cases are the Silent Salesmen cases so extensively advertised by the John Phillips Company of Detroit, Mich.

## NEW YORK STATE.

### Affairs in Syracuse.

SYRACUSE, March 20.—The grocers of Utica who have been selling drugs in violation of the Pharmacy act have just begun to realize that there is such a law, and that the State Board proposes to strictly enforce it. As was mentioned in these columns a month ago, Edward S. Dawson, Jr., secretary of the board, has sent out 235 copies of the following circular to the grocers and general dealers of that city:

DEAR SIR: At a meeting of the State Board of Pharmacy held in Syracuse on March 6, 1896, it was decided that grocers and general dealers in cities and places that are not legally defined as rural districts should be permitted to sell the following drugs at retail—viz., Borax, sulphur, sal soda, saltpetre, bicarbonate of soda, cream of tartar, ammonia, olive oil, dye stuffs. The sale of poisonous dye stuffs must be registered and each package containing such poisonous drug must be plainly labelled with the word "poison," as required by the penal code.

EDWARD S. DAWSON, JR., Secretary.  
126 South Salina street, Syracuse, N. Y.

P. L. RYAN OUT OF M'CARTHY'S STORE.

D. McCarthy & Co., the muslin druggists of this city, who opened a drug department and started the cutting of patent medicines, have decided, after an experience of just one year, that the story of the enormous profits of the drug business is a delusion and a snare. They have parted with P. L. Ryan of the P. L. Ryan Drug Company, who induced them to put in a drug department, and have removed the remnants of their drug stock to their toilet department. Mr. Ryan, who managed this department and his own store at the same time, still continues the cut rate war at his own store. While original prices will probably never be restored, yet the druggists consider this a great victory, and are now assuming a more hopeful view of the situation.

The Rob Roy Chemical Company, formerly of Rochester, has located at 865 Seventh street, Buffalo.

George Swinburne, former manager of the Thomas drug store, now has the management of Geo. Schaefer's pharmacy, corner of Allen and Main streets, Buffalo.

John Frey of the Germania Wine Company, Hammondsport, has just returned from a trip to New York. He reports a very successful business trip in connection with Imperial Sec Champagne.

Craig & Van Derbelt, druggists, formerly on Lyell avenue, Rochester, have been succeeded by J. J. Craig. John Van Derbelt has purchased the H. B. Gilfoil pharmacy, corner of Monroe avenue and Chestnut street, Rochester. Mr. Gilfoil will soon enter a dental college.

The death of Conrad W. Wargenen, druggist at 599 North Clinton street, Rochester, has been announced. The business will be continued by his widow, who has secured the services, as manager, of Henry Aman, formerly of Scherer's pharmacy, corner of Jay and Childs streets, Rochester.

Chas. C. Donald & Co. have purchased the Thomas drug store on Allen street, corner of Park, at Buffalo, recently owned by Henry H. Davis. Mr. Donald hails from Watertown. Dr. Davis has returned to his former home at Camden, N. J., where he has resumed the practice of medicine. G. F. McClintock, a for-

mer clerk, will manage the store for Mr. Donald.

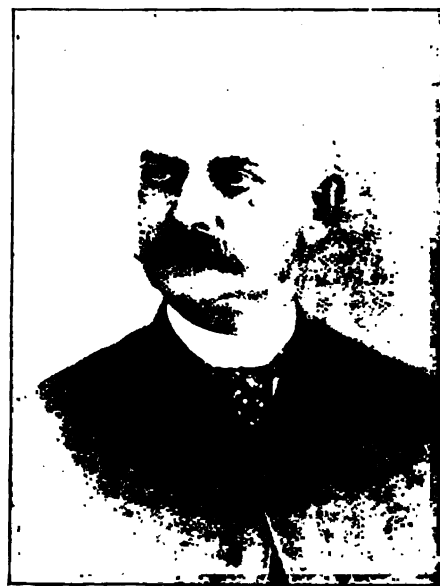
Herman Gnadendorff, a well-known druggist of Troy, succumbed to pneumonia on March 10. The deceased was very enthusiastic in everything relating to pharmacy and was an ardent student. He won the regard and esteem of his townsmen by the integrity of his business career, and his unassuming and refined disposition. His death removes a good citizen, and his presence will be sadly missed. The deceased was a trustee of the Troy Yacht Club. He is survived by three sisters.

The commencement exercises of the Albany College of Pharmacy took place March 17, in Odd Fellow's Hall, Albany, when the following list of students were graduated: J. Harold Wardle, Hudson; Frank H. Bailey, Albany; Mulford A. Burt, Saratoga; Jos. W. Dessert, Glens Falls; Arthur Warren Davenport, West Troy; Christian Gottlieb Hacker, Albany; Loren D. Larkin, Plattsburgh; Frank S. Houck, Coxsackie; Thomas J. Galligan, Cambridge; Harry A. Wickham, Cobleskill; August J. Bergman, Albany; William H. Bush, Albany; Charles J. Straub, Cobleskill; James W. Houston, Malone; John R. Nitzschmann, Schenectady; Joseph Archambeault, Cohoes.

## CONNECTICUT.

### MONEY ORDER OFFICES IN DRUG STORES.

NEW HAVEN, March 20.—Postmaster Beach of this city is progressive. His latest move has been to apply to the department at Washington for the privilege of locating three money order and registry stations in as many drug stores.



HENRY M. BISHOP.

Governor Coffin of Connecticut has reappointed Henry M. Bishop of New Haven, a member of the Board of Pharmacy Commissioners for another term, beginning with June 1, at which time his first term will have expired. The appointment gives general satisfaction, and is a gratifying recognition of the excellent services Mr. Bishop has rendered during his first term. It has always been Mr. Bishop's aim to raise the standard of the examinations, and he has been successful in his efforts.

## MASSACHUSETTS.

## ABOUT LIQUOR LICENSES.

BOSTON, March 23.—Druggists all over the State have been weekly, if not daily, visitors at the State House, since the General Court opened in January. There has been much to interest them, and much in which the trade generally has had a large interest. On Thursday afternoon of last week the Committee on Liquor Law gave a hearing on a bill that provides that no licenses of the sixth class shall henceforth be granted to any person who is not a registered pharmacist, actively engaged in business on his own account; nor to any such registered pharmacist unless he shall present a certificate from the State Board of Pharmacy, stating that such a person is a registered pharmacist. All such registered pharmacists shall be entitled to receive such certificates from said Board of Pharmacy on presenting to said board a written application therefor.

It was the sentiment of the druggists who spoke that the laws at present are too stringent in regard to liquor licenses to druggists. The State Board and its witnesses opposed what they believe an unwarranted laxity in this regard.

## DRUGGISTS' ALLIANCE TO BE REORGANIZED.

The legislative Committee on Public Health has reported leave to withdraw on the petition for an act to regulate the practice of pharmacy in this State. The members of the Druggists' Alliance feel elated over the defeat of the bill, and attribute not a little of the success to the efforts of their representatives who attended the hearings and opposed the measure. In a conversation with President W. W. Bartlett yesterday, that gentleman said another attempt would be made by the Alliance to consolidate the different organizations of druggists throughout the State under one head, the object being to have a great organization for mutual protection. Five or six years ago this plan was broached to the druggists but was not carried through on the same basis as has been laid out now.

The leader in the opposition to the measure, which if it had become a law, would have given unusual powers to the pharmacy board, undertook a big job, but Mr. Bartlett felt he had the support of the best element among the druggists, and unhesitatingly entered the arena without gloves. The board had the assistance of one of the ablest lawyers in the State. The Committee on Public Health gave hearings and fairly heard both sides. The strong arguments, backed up by authority, had their effect, and the committee had pretty good ideas after hearing the druggists' side that the pharmacy board wanted power that was, to a certain extent, unconstitutional. As a result of the agitation the Druggists' Alliance has been materially strengthened, and, as stated before, will be reorganized. A membership of 1,000 in the State will be announced before the year is closed, it is said.

## PASSED THE BOARD.

Forty-one applicants for certificates as pharmacists were examined at the last meeting of the Board of Registration, and out of the two score and one ten were successful. They were: Edwin K. Woods, Greenfield; A. B. Reed, South Weymouth; Wallace A. Prince, Springfield; Oscar E. Kaepfel, South Hadley

Falls; E. W. Reed, North Brookfield; W. E. Conway, Lowell; Alfred D. Woodman, Melrose; F. W. Lavine, Worcester; John R. Durkee, Boston; J. R. Beauvais, Holyoke.

## Notes.

A building situated on Merrimac street, and occupied by Lewis & Co., druggists, and Earl S. Sloan, manufacturer of horse medicines, was injured by an explosion of chemicals a few days ago. Lewis & Co. carried a stock valued at about \$10,000, insured for \$2,500. The injury to their stock was principally by water. Sloan estimated his loss at \$10,000, partially insured.

A revision has been made in the blanks provided by the State Board of Pharmacy for applicants for certificates. In the old blanks there was inserted a clause requiring all applicants to make oath that they had never violated any of the laws of the State in the preceding year. This clause, very much to the satisfaction of all prospective druggists, has been omitted from the new ones.

C. J. Countie (The Riverside Mfg. Company, Boston) is making a number of improvements in the appearance of his pharmacy on Charles street, Boston. The fixtures were designed by himself, and built to his order by Isaac McLean, 182 Charlestown street, Boston. Lippincott & Co. of Philadelphia, furnished the soda fountain, which is five feet long and very handsome. Countie's Roman Punch is now controlled by Kendall & Cushman, 292 Pearl street, New York.

## PENNSYLVANIA.

PHILADELPHIA, March 23.—With the 3,000 books recently donated to the Philadelphia College of Pharmacy by Howard B. French, the total number of volumes in the library now amounts to 10,000. It is the intention of the faculty to make this library the best of its kind in the country.

William Lincoln Cliffe, treasurer of the Alumni Association, has recently branched out in a new store at Kensington avenue and Orleans street; he is meeting with considerable success. Mr. Cliffe is very popular and his new venture is looked upon with approval by all of his friends.

The announcement made in the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD some time ago in regard to the widow of the late Wm. B. Webb, in which it was stated that a trust fund was to be donated for the William B. Webb medal, has come to pass. Some time ago Mrs. Webb gave the trustees \$200, and on April 7 it is her intention to give \$500 more toward this fund, making in all \$700. The medal has already been described in a previous issue of this journal.

The sixth and last social meeting of the Alumni Association of the Philadelphia College of Pharmacy for the series of 1895-1896 will be held in the college on March 24. At this meeting Dr. A. C. Abbott, professor of hygiene in the University of Pennsylvania, has kindly consented to address the Alumni Association on the subject of water filtration. He will describe sand filtration, not only as the means of removing mechanical impurities, but also as a destroyer of germs. Miss Pierce, with her class in elocution, will also be on hand.



D. W. GROSS.

Daniel W. Gross who died on March 11, in Harrisburg, Pa., was one of the oldest pharmacists in the State. He was born within a few miles of Harrisburg on March 11, 1810; his death occurring, as will be noticed, on the 86th anniversary of his birth.

Mr. Gross was educated in the schools of the then borough of Harrisburg and the Harrisburg Academy, an educational institution which was famous in Central Pennsylvania in the first half of the century, and upon whose rolls the names of many prominent Pennsylvanians are inscribed.

He was then indentured (in accordance with the term then in vogue) as an apothecary's apprentice to Norman Calendar, an uncle, one of the earliest pharmacists in Harrisburg.

In 1830 he became a partner in this store near the head of Market street, which a few years later passed under his entire control. In the early years of business the pharmacy was confined to one side of the room while a thriving trade in hardware was conducted at the counters on the other side. Under the title, "Sign of the Big Gold Mortar," this store and the succeeding building erected early in the '60's were described in the anniversary edition of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD issued on August 25, 1895. Though Mr. Gross had, at that date, been an invalid for almost five years he read this series of reminiscences penned by a former clerk with much enjoyment.

Mr. Gross besides being active in pharmacy for many years and establishing for himself a reputation not only in Harrisburg but in the populous valleys which radiate from the city, found time to serve his native place, his church and his State.

Mr. Gross was a man of fine physique and great intellectual vigor. In manner he was essentially "a gentleman of the old school"—a type of manhood all too rare in this ultra-practical period. With the affability of a genuine good nature, innate courteousness, the urbanity of a scholar and a wide acquaintance with pharmacy and cognate science, it is not surprising that he should enjoy for years a lucrative business.

Mr. Gross retired from business about five years ago, leaving his son, Edward Z., in control. E. Z. Gross and another son, George A. (now in the real estate business), both graduated from the Philadelphia College of Pharmacy—the former in '78, the latter in '69.

His death removes a notable figure among the pharmacists of Central Pennsylvania, and one of the oldest in the ranks in the country.

## MICHIGAN.

DETROIT, March 17.—The druggists of Detroit have organized a Pharmacal Cigar Company, the purpose of which is to manufacture and sell a better line of cigars than they can purchase in the market for the same prices. The capital stock is \$25,000, divided into shares of \$10 each, and there are now about 100 subscribers. Each shareholder is obliged to take two shares, and no one can take more than ten. The factory will be started in a small way, employing from 10 to 15 men, and the force will be increased as the growth of trade warrants it. The shop will be under the management of W. E. Flynn of Grand Rapids, and will use the blue label of the Cigar-makers' Union for customers who desire it on their goods. The company have been incorporated under the laws of Michigan, and the following are the incorporators and directors: C. N. Anderson, O. H. Grunow, D. F. Halleck, G. W. Stringer, A. F. Parker, D. L. Robbins and W. E. Flynn. O. H. Grunow is president, D. S. Halleck, vice-president; C. N. Anderson, secretary and treasurer; James Verner and Frank Inglis, auditors.

Walker & Scott have succeeded A. F. Patch in the drug business at Shepherd, Mich.

C. H. Law & Co. of Menominee, Mich., have moved into handsome new quarters in what is known as the Stevenson Annex. The store is commodious and has been elegantly fitted up.

The Executive Committee of the Michigan State Pharmaceutical Association have selected Mackinaw Island as the next place for holding the annual meeting. The date has been set for some time in August.

C. N. Anderson, manager of the Detroit Pharmacal Company, has resigned, and has been succeeded by J. W. Seeley, who has until recently been in charge of a department in the laboratory of Parke, Davis & Co. Mr. Seeley has had seven years' experience also in the wholesale trade of Detroit, two years of which he spent on the road.

Among the traveling men in the drug lines who have recently visited Detroit, were the following: E. H. Ross, John Wyeth & Bro., manufacturing chemists, Philadelphia; Franklin Bleck, Chas. Pfizer & Co., New York; Walter D. Brenn, Tyler & Finch, New York; George B. Trenchet, E. Fougere & Co., New York; F. S. Farmer, Carter's Ink Company; W. B. Fiske, Jr., Wm. G. Morring & Co., New York; Edward Gage, Wallace & Co., New York; Chas. W. Griffiths, Herf & Frerichs Chemical Company; W. W. Landman, Fleischmann & Co., liquors, Cincinnati; J. C. M. Gates, Corning & Co., Peoria, Ill.; Livingston D. Wells, M. N. Packard Company, New York; Mr. Manning, Albany Chemical Company; L. R. Dronberger, Thurston & Bradich, gums and spices, New York.

The druggists at Jackson, Mich., have formed an association for the purpose of affiliating and to avoid rate cutting. They will adopt a schedule of prices, and all will agree to adhere to it. The officers are as follows: Dr. J. B. Townsend, president; Bishop Humeston, vice-president; E. J. Van Marter, secretary, and D. C. Meseroll, treasurer. Complaints of violations will be referred to a Guidance Committee, consisting of C. M. Giddings, F. L. Henderson and D. J. De May. At

a meeting of the association, held March 6, at which the organization was completed, one of the druggists, of whom nearly all the others had complained regarding his rate cutting, was arraigned on that score. He responded by producing a medicine case, from which he produced a large number of bottles, which he placed in a row on a table. He then showed the members that he had purchased these bottles and their contents from the different druggists present, through agents he had employed. Each bottle had the label of the druggist from whom it was purchased, and the price was marked upon it. In every case there was a cut in the price. This cast quite a gloom over the meeting for a while, but at last all made confessions of their cutting and passed a vote of thanks to the shrewd brother for catching them so nicely.

## MICHIGAN STATE BOARD.

The State Board of Pharmacy met at Grand Rapids on March 5. The standard for passing was raised to 70 per cent. for the first time at this session, and this caused many candidates to fall by the wayside. Of the 54 candidates for registered pharmacists, the following 15 passed: Cohen Bechtel of Caledonia, Alfred Kraft of Caledonia, O. F. Beeson of Cassopolis, B. F. Butzback of Benton Harbor, Harry Cowan of Grand Rapids, C. E. Hammond of Kalamazoo, Leroy H. Moss of Maple Rapids, Alex. Reid of Toronto, J. R. Schoonmaker of Plainwell, F. H. Sumner of Detroit, E. E. Tice of Bloomington, R. W. Van Hoef of Kalamazoo, E. W. Wait of Traverse City, F. L. Woolston of Grand Rapids, J. F. Martin of Bay City. Of 17 applicants for registered assistants, the following seven passed: William W. Bailey of Boyne City, T. G. Hoyt of Fremont; H. E. Irish of Jackson, H. C. Kitchen of Leonidas, Nora I. Mitchell of Hubbardston, E. M. Wheeler of Cedar Springs, John C. Wierenga of Grand Rapids. The next meeting of the board will be held at Star Island, St. Clair Flats, June 22, opening at 8 o'clock p. m.

## ILLINOIS.

CHICAGO, March 20.

C. J. Casbaum has opened a new drug store at the corner of West Harrison street and Albany avenue.

Frederick W. Kruse has purchased the drug store at the corner of North Clark and Kinzie streets from the executors of the late A. Overman.

B. A. Holliday, for several years with Weipert's Pharmacy, Ninth and Olive streets, St. Louis, is now representing the Searle & Hereth Company in that city.

The drug store occupied by Geo. H. Mayr at the corner of La Salle and Washington streets was badly damaged by fire and water on the morning of the 4th inst.

The report that a receiver had been asked for the Liquid Carbonic Acid Mfg. Company is entirely without foundation. The business is being run as usual, and is showing a steady gain over last year.

Judgment for \$1 and costs, a total of \$5, was rendered in Justice Fitzgerald's Court, against Dr. Charles B. Engels, who has a drug store at Forty-seventh street and Union avenue. Walter Wynn, a 12-year-old boy, started the suit.

The Illinois Pharmacal Company opened their laboratory on the 9th inst., and are now ready for business. The management of the company is in the hands of T. V. Wooten, who is also president of the Chicago Retail Druggists' Association.

At a meeting of the Chicago College of Pharmacy on the 17th inst., W. S. Sernpill was elected president and Mr. Dunham elected as trustee to succeed himself. A. G. Hiss was elected trustee in place of A. C. Fleischer, resigned. There will be a meeting of the board of management on the 24th inst. when they will elect the officers of the college for the year.

Johnson & Johnson have just made a new use of their trade-mark (the Red Cross) in the shape of a very handsome button, and judging from the popularity of their goods it will be worn by every druggist and drug clerk in the country, and if their customers inquire the meaning of J. & J. on the cross, they will be told that it stands for "Joy and Justice," and that proof of it will be found in the merits of their goods and the prices at which they are sold.

## MISSOURI.

ST. LOUIS, March 20.—For several days past the students in the pharmaceutical laboratory of the St. Louis College of Pharmacy have been working overtime getting up a line of preparations for exhibition to their friends among the medical students of Beaumont College. Prof. Francis Hemm had been invited to deliver a lecture to the students of the Beaumont Medical College on "National Formulary Preparations."

## MISSOURI BOTTLERS' ASSOCIATION VS. ST. LOUIS RETAIL DRUGGISTS.

The war bugle of the Missouri Bottlers' Association is sounding the battle call, and preparations are being made for a charge on the retail druggists' camp. Notices were recently served on a number of our local pharmacists that they had been violating the Missouri bottle law, and proceedings would be at once instigated against them. A representative of the Missouri Bottlers' Association also called upon the pharmacists to see what they had to say for themselves. Your representative made the rounds of many of the retailers, some of whom had been accused of violating the law, and in every case found the pharmacists much vexed over the affair. As near as can be ascertained from a close canvass of the situation, the cases against the druggists are exceedingly few and far between.

## The Germania Wine Cellars.

Reports from the Germania vineyards, at Hammondsport, N. Y., mention that the vines there are nearly all pruned, and have passed through the winter in fine condition, and the prospects for a large crop of grapes the coming season were never better. Of course, the crop is never assured until after the blossoming season, and the grapes have formed on the vines, which usually occurs about June 1. The proprietors of the Germania Wine Cellars extend to all the readers of the AMERICAN DRUGGIST a kind invitation to visit their cellars and see for themselves how pure wines are made.

### Does Your Cash Balance?

The Hough Cash Recorder Company of Springfield, Mass., say that your cash will always balance if you use a Hough Cash Recorder. It introduces system in the recording of cash sales, and is an effectual check against forgetfulness upon the part of the person who makes the sales. It will be to your interest to write to the Hough Cash Recorder for a copy of their latest circular showing the mode of operating the register and giving prices.

### The Pinaud Bottle Stopper Suit.

The solicitors of the Hero Fruit Jar Company of Philadelphia have notified several dealers that the sprinkler tops used on Ed. Pinaud's goods are sold in infringement of a patent, No. 250,163, issued November 29, 1881, and now held by the Hero Fruit Jar Company.

Emil Utard, the American representative of Pinaud, has replied to this notice, which was not served upon him but upon retail dealers, by the statement that the stoppers used on Pinaud's goods are sold under a patent issued in France in 1876, and to the same inventor in the United States in 1878. He further states that in 1889 the Hero Fruit Jar Company notified the house of Pinaud that they claimed a patent on those stoppers, and they at the same time brought suit against Mr. Marhwald, the United States representative of the French patent. Mr. Marhwald guaranteed the house against any damages arising out of the suit, and about 1891 Pinaud was informed that the Hero Fruit Jar Company had been defeated in this suit, and that the sale of the stoppers is not an infringement, and Mr. Utard, therefore, requests any one receiving any notice of this sort to transmit same to him or to Pinaud's attorneys, Putney & Bishop, 113 Broadway, New York City.

### A Requisite for the Soda Water Season.

This is the proper season to prepare for the summer soda-water campaign, and the purchase of a stock of Welch's grape juices is one of the most important of the steps to be taken by the dispenser of soda water. With their cellars right in the midst of one of the most prolific grape centers in the United States the Welch Grape Juice Company of Vineland, N. J., are in a position to get the finest selected grapes in the best possible condition at the lowest price, and these advantages they avail themselves of fully, as can be seen by any one who will write them for prices and samples mentioning the AMERICAN DRUGGIST.

### Worthy the Consideration of Live Dealers.

The Diamond Wall Finish Company, manufacturers of Gypsine, the permanent wall finish, are doing some advertising that should attract the serious attention of every thinking and enterprising paint dealer.

They are now starting in newspapers throughout the country an advertisement to run through the wall finish season. The ads to be used are original and taking, and promise highly satisfactory results in the way of reminding the consumers of the merits and advantages of Gypsine. The work, being planned to

begin with the house cleaning season and to run through it, will bring immediate results.

The dealers who are always looking for a reliable article on which to realize quick sales should not miss this chance. Put in a stock of Gypsine—if you are not already handling it—and insert in the newspaper advertising which you are carrying regularly, the announcement that you are handling this reliable and well known wall coating. Then use the effective and original advertising with which the Diamond Wall Finish Company furnish all their dealers, and you are bound to realize a good and profitable trade, for you will be handling an article for which there is a live and active demand—a demand that will continue and increase, because Gypsine is all that the manufacturers claim for it.

This is well worthy the consideration of the live dealer who is looking for solid good things.

### A Governmental Approval.

The Italian Government has established analytical laboratories at the great im-



porting centers all over the world, and at these laboratories Italian wines and liquors are carefully analyzed by expert government analysts. Any product bearing the stamp of approval of these laboratories which are termed *cenotechnic* stations can be used with absolute assurance, both as to its purity and as to its being genuinely Italian.

The Robbia Amaro Bitters are examined by the *cenotechnic* station, and thus bear the stamp of governmental approval. Public approval was long ago won by these bitters all over Europe, and though they are but just beginning to become popular in the United States, they have already proven to be wonderfully good sellers wherever properly introduced. They have been made for hundreds of years by the monks of the fine old Italian monastery of Certosa di Pavia, and may truly be said to be made with religious care in every detail. Write to Erastus D. Corning, Auburn, N. Y., for introductory terms.

### Soda Fountain Supplies.

A useful descriptive circular of soda fountain requisites is being sent to the trade by Whitall, Tatum & Co., manufacturers of druggists' glassware and sundries, of New York, Philadelphia and Boston. The list includes illustrations and prices of soda and mineral tumblers, Acme tumbler holders in various designs, lemonade shakers, ice bowls, ice scoops, ice cream soda spoons, rubber coin mats, soda checks, acid phosphate bottles, lemon squeezers, ice shavers, ice planes, &c. Copies can be obtained by sending your name and address to Whitall, Tatum & Co.

## Review of the Wholesale Market.

NEW YORK, March 24, 1896.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

Business in the several departments of Drugs, Dyestuffs and Chemicals has continued fair during the interval, though the recent severe weather has interfered to some extent with the operations of buyers. Better business conditions are looked for with the advance of spring, and jobbers and importers are, as a rule, more hopeful of a good volume of business than for some time. Prices are well sustained as a rule, and buyers are confronted with a stronger tendency of values for the leading staples, though a few changes of a lower character have occurred since our last report. Some complaint is made regarding the difficulty of making collections. The more important advances and declines are tabled below as follows:

#### ADVANCED.

Cod Liver oil.  
Carbolic acid.  
Gentian root.  
Ipecacuanha.  
Senna leaves.  
Arsenic.  
Gallic acid.  
Cardamom seeds.  
Japan wax.

#### DECLINED.

Opium.  
Menthol.  
Oil citronella.  
Golden seal root.  
American saffron.  
Gum senegal.  
Balsam Peru.  
Ergot.  
Cream tartar.  
Oil cassia.  
Gum asafetida.  
Balsam copaiba.  
Coriander seed.  
Jalap.

#### DRUGS.

*Arnica Flowers* have met with rather better sale during the interval, though the business passing does not rise above jobbing proportions. The increased demand has not affected prices, and 6¼ to 6½ is still quoted as to quality.

*Balsams.*—Copaiba is in better supply and offers in some instances at a shade below previous quotations, say 81c. to 82c. for Central American and 85c. for Para. Tolu may yet be obtained at about 47½c. to 50c. Peru is given very little consideration and values have declined, with \$2 quoted for round lots. *Canada Fir* continues inactive, but prices are unchanged, say \$2.15 to \$2.25. *Oregon Fir* continues to offer at 60c. to 65c. in barrels and 70c. to 75c. in cans.

*Bark, Cascarilla*, is under good control and values are hardening, though 8½c. to 10c. will yet buy. Other barks are without important change in price, and generally quiet.

*Buchu Leaves* remain quiet, but importers continue to ask 12c. to 15c. for short and 20c. to 22c. for long, as to quality.

*Cacao Butter* continues quoted at 80c. to 81c. as to quantity, with only small sales making, and the demand limited.

*Chamomile Flowers* are taken with more freedom, numerous small sales being reported at 12c. to 15c. for Roman and German and 10c. to 12c. for Belgian.

*Colocynth Apple* continues very dull, though nominally unchanged in price. Trieste held at 67c. to 70c., and Spanish 20c. to 22c.

*Cod Liver Oil* continues to climb upward, and prices are now held very firmly at the recent advance to \$62 to \$65 for Norwegian. The higher prices prevailing for this variety of oil has created a de-



mand for Newfoundland, and some activity in this variety has developed with \$1 to \$1.25 quoted as to quality.

*Cubeb Berries* continue extremely dull in the face of a liberal supply. XX is quoted 9c. to 10c. for stemless, while 7c. to 8c. will buy lower grades.

*Coca Leaves*, Huanuco, are in better supply, though prices have not varied materially since our last, 27c. to 28c. being still quoted; Truxillo is held at about 20c. to 21c.

*Cocaine* has been reduced by the leading manufacturers and is now quoted \$4.25 to \$4.50 in 100-ounce lots.

*Ergot* continues dull and neglected, with Spanish quoted 19c. to 20c. for new, and 18c. to 18½c. for old. German is held at 14c. to 15c. for new and about 12c. for old.

*Guarana* continues weak and little inquired for. Although generally quoted higher, 55c. will buy in most instances.

*Juniper Berries* continue inquired for, and among other transactions we are reported sales of 50 bags at 1¼c.

*Menthol* has sold fairly in the interval and at a slight decline from previous prices, \$4.10 being the common figure. Lots to arrive are offering at \$4, though that price represents but a small fraction above net import cost.

*Morphine* is selling fairly in small lots, with prices as quoted for some time past, or, say, \$1.60 for P. & W. and \$1.50 for other domestic brands in bulk, and \$1.45 to \$1.60 for foreign.

*Opium* has dropped another notch in the interval and sales of case lots have been made down to \$1.90 with some pressure to realize noticeable. The range for broken packages is \$1.95 to \$1.97½. Powdered is held at \$2.60 to \$2.75 for ordinary, up to \$3 for high test.

*Quinine* prices remain unchanged in the face of a spiritless market and a close understanding between manufacturers. Outside lots are offering at 26c. to 27c., according to brand and quantity, with 26½c. the common inside quotation. Manufacturers' figures remain at 30c. for P. & W. and 28c. for other brands.

*Saffron*, new crop American has been received, and sales are making at 88c., though an early advance on this price is anticipated. Alicante is held at \$4.75 to \$5.25 and Valencia \$6 to \$7.

*Senna Leaves*, Alexandria, are advancing in the primary market, though prices here are as yet unaffected. Prices are decidedly firmer, however, and the range for good quality is 15c. to 25c. Tinnivelly is also firm at 8c. to 8c. as to quality, with only limited business passing.

#### DYESTUFFS.

*Aniline Salt* is slightly firmer, though prices are nominally unchanged, 11c. to 11½c. being yet quoted.

*Cutch* is not inquired for to any extent, though a fair business is reported, including sales of some 1,000 bales at 5¼c. to 5½c., according to mark.

*Divi Divi* continues in fair active demand at the previous quotation of, say, \$40 to \$42.50. A poorer quality offers at \$32.

*Gambier* continues in demand and fairly steady, with sales reported of 500 bales, steamer, at 4.05c. cash and forward shipment quoted 4 1-16c. to 4 8-16c.

*Sumac* continues firm and in demand, Sicily bringing \$48 to \$50 and Virginia \$38 to \$40.

#### CHEMICALS.

*Arsenic*, white, has advanced a notch or two in the interval. English could have been secured at 6¼c., possibly at 6½c. in carload lots. Continental has sold fairly in ordinary store lots at 6¼c. to 6½c.

*Carbolic Acid*, crystals, has been advanced in this market to correspond with higher prices in the foreign market: 1 lb. bottles are now quoted 24c. and drums 17c. to 18c.

*Cream Tartar* prices have dropped a notch, with manufacturers now quoting crystals at 26c. and powdered at 26c. to 26½c., as to quantity.

*Chlorate Potash* is slightly firmer, with a lower quotation than 9¼c. now the exception.

*Citric Acid* is shaded a fraction from second hands, say ½c. under our quotations.

*Gallic Acid* has been advanced by the manufacturers to 50c. to 55c.

*Nitrate Soda* has weakened a trifle in the interval, and \$1.72½ is a common quotation for round lots, with rumors of sales down to \$1.70.

*Quicksilver* is not affected to any extent by the decline in the London market, and 50c. to 51c. will yet buy, and prices here are maintained with some show of firmness.

#### ESSENTIAL OILS.

*Anise* continues jobbing quite freely and the market is well sustained at \$2.50.

*Cassia* has weakened in the interval with low test, 50 or under now offered at \$1.50 and high test at \$2.

*Cintronella* is also rather weak, with sellers of true at 45c. in drums and 50c. in tins.

In other oils there is nothing new or interesting to report either as regards price or demand.

#### GUMS.

*Aloes* have hardened a trifle in the interval, with Curacao now quoted 8½c.

*Arabics* are reported higher in the foreign markets. The advance, according to latest advices, is 5 per cent. on picked to 25 per cent. on sorts. The advance is due to the recent troubles in the Soudan, and still higher prices are generally anticipated.

*Camphor* remains quiet, with domestic compressed quoted 58c. to 60c., and Japanese 59c. to 61c.

*Chicle* continues in fair jobbing demand, with sales at 36c. to 36½c.

#### ROOTS.

*Aconite* is higher in the foreign market and prime stock now costs about 7½c. laid down. Spot stock quoted at 7½c. to 8½c.

*Golden Seal* is somewhat easier with sellers, at 20c., but only moderate quantity offered.

*Gentian* continues scarce, and while the article is meeting with no remarkably large demand, prices are firmer; 6c. is now asked for small parcels.

*Ipecac* is in small supplies and prices are firm, with less than \$1.85 the exception for ordinary quality.

*Jalap* is weaker, recent business having been done at 9c. to 10c.

*Sarsaparilla*, Mexican, continues dull and lifeless at the previous range.

#### SEEDS.

*Cardamom* continues in demand and firm, with 85c. asked for decorticated.

*Celery* is quoted higher in the foreign markets and prices here are very firm, 12½c. to 13c.

*Coriander* on spot is very steady at about 4¼c. for natural and 4½c. for bleached.

Other seeds remain steady at previous prices.

#### The Philadelphia Optical College.

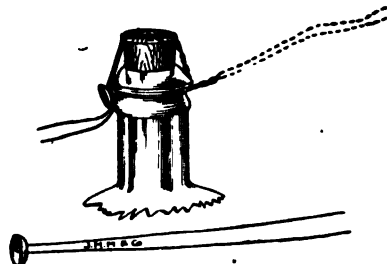
A school for practical instruction in optics has been founded in Philadelphia, in which a correspondence class has been formed for the convenience of druggists who wish to make a study of this branch of science. The degree of Doctor of Refraction is conferred on all who comply with the requirements of the college. Full particulars of the home course of study and requirements for graduation, with fees, can be obtained from Dr. C. H. Brown, 1824 Diamond street, Philadelphia, Pa.

#### The Soda Fountain in the House of Representatives.

The long and hotly contested fight among the leading soda fountain manufacturers for the order for the fountain to be placed in the café of the National House of Representatives was recently won by the Low Art Tile Company of Chelsea, Mass., and thus is added another to the many works of art which already adorn the nation's capital. It may be added, by the way, that a no more fitting place could be found in which to exhibit so beautiful a specimen from one of America's leading industries. That one of the youngest competitors in this field should have carried off this prize must be a source of self-congratulation which is fully deserved.

#### For Wiring Effervescent Waters.

John M. Maris & Co., manufacturers of druggists' glassware and sundries, 312 Market street, Philadelphia, and 219 Fulton street, New York, are calling attention to their patented wires for tying corks in citrate of magnesia bottles in place of the string now generally used. The point is made that they are rapidly applied and are effective, and at the same time can be easily applied. They are



economical, too, as they can be used over and over again. The figure shown herewith conveys a good idea of the mode of applying it. They will be popular with your customers, for after part of the contents of a bottle has been used the cork can be tied down again tightly which cannot be done with string. The price is so low that they can be used instead of string. Prices and samples can be obtained by any retail druggist on request to John M. Maris & Co., New York and Philadelphia. Many druggists are selling them to customers who make home-brewed birch beer, which is getting to be quite the fad.

### Sponge Supply in Danger.

The sponge supply of the United States is seriously threatened by the wanton carelessness of the Cuban sponge fisher men. For several years they have been gathering the small or infant sponges with those of larger growth. The inevitable result is that the Cuban sponge beds, from which the greater portion of sponges used in the United States come, are threatened with total extinction.

Already prices have advanced, and a still further increase is probable within a very short time. The shipments of sponges to dealers vary greatly in size and time of receipt. To gather them it is necessary that the water should be absolutely clear, and if for any reason the ocean is disturbed in more than ordinary degree over the sponge beds the fishermen must wait for clear water—perhaps a week, or even a month.

The sponges which come from Cuba are known as medium grade, the variety in general use. Florida and Nassau furnish a proportion of the supply of this grade, but nothing like the amount that comes from Cuba. The best sponges are known as the Mediterranean variety, as they come from beds in the sea of that name. They are the heavy white sponges, and are always high-priced. Even the supply of these, however, is much smaller than usual. So people can make up their minds that this is not a year of cheap sponges.

### Order Your Glassware Now.

Whitall, Tatum & Co. have issued the usual spring notice regarding the suspension of work in their green and flint glass factories during the months of July and August. They request customers to order glassware wanted for use during that time or during the month of September at as early a date as practicable, to insure being made before the factories close.

### Thomas Dover, Physician, Buccaneer and Originator of Dover's Powder.

As Sir Thomas Browne remarks in the *Hydriotaphia*: "The iniquity of oblivion blindly scattereth her poppy, and deal with the memory of men without distinction to merit of perpetuity." Thus it happens that Thomas Dover, the Doctor, has drifted into our modern life on a powder label (to which way of entering the company of posterity, though sanctified by Mithridates, many would prefer oblivion, even to continuous immortality on a powder so potent and palatable as the *pulvis ipecacuanhæ compositus*); while Thomas Dover, the Buccaneer, third in command, one of the principal owners, and president of the Council of the "Duke" and "Duchess"—privateers of the ancient and honorable city of Bristol—discoverer of Alexander Selkirk (the original "Robinson Crusoe"), in spite of more enduring claims on our gratitude, has been forgotten.

Thus opens a historical sketch by Dr. Wm. Osler, in the *Johns Hopkins Hospital Bulletin*, and it may not be without interest to our readers to learn something of the inventor of this long popular sudorific. Dr. Dover was born in 1660, was a Bachelor of Medicine of the University of Cambridge, practiced in the town of Bristol, and having made a financial suc-

cess, joined with several of the leading merchants of Bristol and fitted out a privateering expedition which sailed in 1708.

... "against the Spaniard with his hoard of plate and gold, which he wrung with cruel torture from the Indian folk of old."

The expedition was composed of two vessels, the "Duke" and the "Duchess," and was in command of Captain Woodes Rogers, with the doughty Dr. Dover, third in command, with the title of captain. In his book bearing the title of "A Cruising Voyage Around the World," Captain Rogers has left an interesting account of the finding of Alexander Selkirk ("Robinson Crusoe") upon the Island of Juan Fernandez on February 2. Dr., now Captain, Dover had charge of the yawl of the vessel which was sent ashore, and which discovered and brought away from the island Alexander Selkirk, who had been left there alone for four years and four months. Selkirk was immediately taken as mate, he being an excellent sailor, and served with the expedition in that capacity until it finally landed in Bristol, when his share of the proceeds amounted to £800 or \$4,000.

After rescuing "Robinson Crusoe" the expedition sacked the two cities of Guayaquil, Dr. Dover leading the van. They took several prizes along the coasts of Peru and California, and Dover himself took command of the largest of the prizes as captain. In 1711 the expedition reached England, the profits amounted to £170,000, and to Dr. Dover fell a very considerable portion of this sum. Although wealthy and about 50 years of age, he still was too active to settle down to a life of retirement, and, while nothing is known positively as to his occupation for the next ten years, it is probable that he spent the greater portion of that time in traveling. He was admitted as a licentiate to the Royal College of Physicians in 1721, but did not settle down permanently in London until 1731, and thus at the advanced age of 70 assayed to enter practice in London and, singular to say, met with a very large measure of success.

"To abet his laudable endeavors," says Dr. Osler, "he resorted to the time-honored plan of writing a book. Of the popular or semi-popular treatises on medical subjects so common in those days, a few were by very able men. George Cheyne's 'Essay on Health and Long Life' forms an exception to Latham's sweeping criticism on books of this class (quoted by W. A. Greenhill), 'They are all bad, and many dishonest.' A favorite plan was to write a treatise on some mineral water, lauding the virtues of a particular spa. Smollett, who knew so well the trials, vexations and disappointment incident to beginning medical life in London, has sketched in strong lines the condition of the profession in the fourth and fifth decades of the century. He, too, had made an unsuccessful attempt to introduce himself in an 'Essay on the External Use of Cold Water,' etc. Dr. Latham with his 'hotch-potch of erudition and extravagance,' and the pedantic doctor in 'Peregrine Pickle,' in whom he satirized the learned Dr. Akenhead, were well-known types; while in Dr. Fathom the 'mystery' of the sons of Paean, as he terms them, is mercilessly exposed. Among the means used to force a trade" \* Smollett men-

\* This seems to have been a stock phrase; Cheyne uses it in his *English Malady*, in an autobiographical note.

tions 'the insertion of cures by way of news in the daily papers,' the erection of a 'hospital, lock or infirmary, by the voluntary subscription of his friends; a scheme which had succeeded to a miracle with many of the profession, who had raised themselves into notice on the carcasses of the poor.' To understand Dover's relations with the apothecaries (to which subsequent reference will be made) the reader must know that they were the general practitioners of that day, and dispensed their own medicines, but in serious cases always called in a physician or a surgeon. Smollett's account of the practice 'parcelled out into small enclosures, occupied by different groups of personages,' who tossed the ball (the patient) from one to another, would almost fit modern usage, in which a patient is sometimes tossed in a circle from specialist to specialist, until he returns with an inventory of his local woes to the consultant from whom he started. In Smollett's days the patient had to be content with three, except in the cases requiring a midwife. 'The apothecary being summoned, finds her ladyship in such a delicate situation that he declines prescribing, and advises her to send for a physician without delay. The nomination of course falls to him, and the doctor being called, declares the necessity of immediate venesection, which is accordingly performed by the surgeon of the association.'

"While meriting the general criticism of Latham, the work with which Dover trusted to reach practice had many important qualifications for success. It appealed directly to the public in a taking way, not alone in the main title, 'The Ancient Physician's Legacy to His Country, being what he has collected himself in Forty-nine Years of Practice,' but in asserting that the diseases incident to mankind are described in so plain a manner 'that any person may know the nature of his own diseases; together with the several remedies for each distemper faithfully set down.' It is expressly issued as a popular work on medicine, 'Designed for the Use of all Private Families.'

### THE FORMULA FOR DOVER'S POWDER.

"On page 18, in the section on gout, is given the formula of his famous powder. 'Take opium one ounce, salt petre and tartar vitriolated each four ounces, ipecacuanha one ounce. Put the salt-petre and tartar into a red-hot mortar, stirring them with a spoon until they have done flaming. Then powder them very fine; after that slice in your opium, grind them to a powder, and then mix the other powders with these. Dose from 40 to 60 or 70 grains in a glass of white wine Posset going to bed; covering up warm and drinking a quart or three pints of the Posset—drink while sweating.' The same formula is repeated in all the editions. He says that some apothecaries have desired their patients to make their wills and settle their affairs before they venture upon so large a dose as from 40 to 70 grains. 'As monestrous as they may represent this, I can produce undeniable proofs where a patient of mine has taken no less a quantity than an hundred grains, and yet has appeared abroad the next day.'

"Doubtless the old buccaneer doctor, who 'was a man of rough temper and could not easily argue with those about him,' was a striking figure as he passed along the strand to the Jerusalem Coffee

House, where he saw his patients. A good fighter, a good hater, as alas! so many, many physicians have been, his weaknesses and evil behavior we may forget, but Captain Thomas Dover, who on February 2, 1710, found 'Robinson Crusoe,' the world should not forget; and we also of his craft have daily cause to remember with gratitude the student and friend of the great Sydenham, who had the wit in devising a powder to remember his master's injunction: *Sine papa-veribus, sine opiatis et medicamentis, ex iis confectis, manca et clauda, esset, medicina.*"

The B. F. Goodrich Company, Akron, Ohio, manufacturers of rubber goods, although they persist in their mad career of using other mediums than *The Spatula*, and have the very reprehensible habit of paying no attention to letters asking for electrotypes of their new devices, are, nevertheless, to be given credit for the use of first-class skill in the creation of their advertising matter, which is not so conspicuous for its quantity as it is for its quality.—*The Spatula*.

#### A Parisian Remedy.

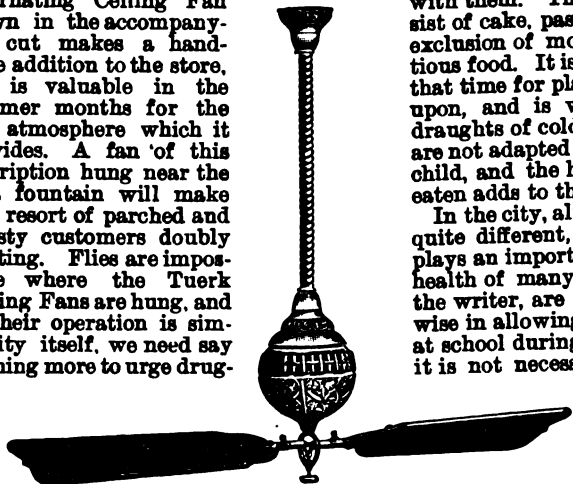
A Parisian physician is said to have prescribed a nightly dose of infusion of fig leaves for a patient whose dreams were peopled by visions of naked women.

#### The Delaware Meeting.

We have received an announcement of the forthcoming annual meeting of the Delaware Pharmaceutical Society. The society will meet in Dover May 7, and as the location is central, the local committee expect a large attendance of the druggists of the State, and invitations have been sent to the leading manufacturers, who are asked to make an exhibit at the meeting. The Delaware Pharmaceutical Society was organized May 7, 1887, and incorporated three years later. Its officers are: President, N. B. Danforth, Wilmington; vice-presidents, J. B. Butler, M.D., Newark; Eldad L. Clark, Dover; George E. Smith, Laurel; treasurer, John J. Gallagher, Wilmington; secretary, John M. Harvey, Wilmington.

#### For the Soda Fountain.

The Tuerk Water Meter Company of Fulton, N. Y., are introducing their patent ventilating fans to the drug trade and already report a good demand. The Alternating Ceiling Fan shown in the accompanying cut makes a handsome addition to the store, and is valuable in the summer months for the cool atmosphere which it provides. A fan of this description hung near the soda fountain will make that resort of parched and thirsty customers doubly inviting. Flies are impossible where the Tuerk Ceiling Fans are hung, and as their operation is simplicity itself, we need say nothing more to urge drug-



gists to send to the Tuerk Water Meter Company for a copy of their latest catalogue, which is fully illustrated and instructs prospective buyers as to how to order.

#### Frederick Humphreys, M.D.



Dr. Humphreys celebrated his eightieth birthday on March 11, at his estate, Thomasville, Ga., surrounded by his family and friends.

The doctor enjoys remarkably good health at fourscore and divides his time between his three palatial homes in New York City, Monmouth Beach and Thomasville, Ga.

Dr. Humphreys' Specifics are known the world over, and his writings have been translated into many languages. He is still in business, his associates are his sons, Doctors Fred. H. and F. Landon, and H. B. Harding.

#### School Luncheons.

In an editorial on this subject published in the November number of the *Archives of Pediatrics* the writer remarks that a prolific source of indigestion, irritability, and anemia among children is to be found in the character of the luncheons they eat at school. In the country, where the distances are great, many children are obliged always to take their luncheons with them. This too often, he says, consist of cake, pastry, and preserves, to the exclusion of more digestible and nutritious food. It is, as a rule, eaten in haste, that time for play may not be encroached upon, and is washed down with large draughts of cold water. Such luncheons are not adapted to the needs of a growing child, and the haste with which they are eaten adds to their pernicious tendency.

In the city, although the conditions are quite different, the school luncheon also plays an important part in depleting the health of many children. Parents, says the writer, are frequently extremely unwise in allowing their children to remain at school during the luncheon hour when it is not necessary. They would be far better for the exercise of walking to and from school, as well as for a warm and properly prepared luncheon. Not in-

frequently the child is allowed to buy his luncheon at some neighboring bakery, and a neighboring bakery is a very common accompaniment of a large city school. The writer was recently passing one of these bakeries just at the luncheon hour, and, he goes on to say, it was thronged with school children, chiefly girls from 10 to 14 years of age. A small procession was passing back to the school, each girl with a paper sack in her hand. Being curious to see the character of the purchases, he entered and found without exception that the paper sacks were being filled with cakes or pastry, chocolate éclairs being apparently at a premium. The wares of the shop were prepared apparently for the special purpose of catering to the school trade, and consisted almost exclusively of cakes and small pies designed for luncheon purposes.

These girls were at that time preparing for examination and promotion. Some of them were undoubtedly a source of anxiety to fond parents because of listlessness, irritability and growing anemia. If the doctor was consulted he undoubtedly gave much good advice and prescribed tonics. Advice and tonics would prove, however, equally unavailing on such a diet.

#### Canadian Druggists.

The annual dinner of the Pharmaceutical Association of the Province of Quebec took place Wednesday, February 5, in the Richelieu Hotel, and proved a most gratifying success, about 80 students, professors of the College and invited guests being present. Among the latter were Sir Senator William Hingston, M.D.; Professors Morrison, Lecours, Dr. Reid, D. Watson and E. Muir, secretary and registrar. The *ménu* having been disposed of, a very pleasant evening, under the presidency of L. A. Genest, was spent with songs and sentiments. The toast of the "Association" was responded to by P. G. Moore, the "College of Pharmacy" by Mr. Roy, the "Professors" by J. E. P. Lemieux, the "Invited Guests" by J. B. Biron, the "Press" by E. R. Desrosiers, and the "Ladies" by Ed. Thivierge.

CREDITOR (roughly): "Say, when are you going to pay me that bill?"

Debtor (genially): "My friend, you put me in mind of a little child."

Creditor: "I do, do I? Why?"

Debtor: "Because a little child can ask questions that the wisest men cannot answer."—*Tid-Bits*.

The March price-list of the Robinson-Pettet Company, wholesale druggists, Louisville, has been issued, and is replete with information concerning the varied line of drugs, chemicals, medicines, paints, oils, varnishes, window glass, glassware, etc., handled by the firm. Druggists in the South and West will find the price-list especially valuable.

The Physicians' Visiting List, published by P. Blakiston, Son & Co., 1012 Walnut street, Philadelphia, comes to us this year with increased space for writing names, a special page for weekly "amounts," and a column for the ledger page. The list forms an excellent present for physicians, and druggists who wish to do their medical patrons a favor would do well to order a few for distribution in this way.

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We are not responsible for any money paid to agents. All communications should be addressed to the American Druggist Publishing Co., 65 West Broadway, New York, and all remittances made payable to them.

## From Key West.

The AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD reaches far. Porter Farley of the Rochester Show Case Works, tells of an order he received lately for six plate-glass show cases. It came from P. Guichard, Key West, Fla.

## LEADING ARTICLES.

"The Pharmacy Laws of the United States," by Prof. J. H. Beal of Scio, Ohio, is continued in this issue (see page 213), and the laws of half a dozen States are given in abstract.

"Pharmaceutical Progress" (p. 215) contains several notes of practical interest.

"Dispensing Queries" includes some notes of special interest to the prescription clerk.

A simple but effective centrifugal apparatus is shown on page 217, while on the same page an able article appears, from the pen of Wm. Bodemann.

"Cod Liver Oil and Its Emulsification" (p. 218) is a timely contribution.

"Granular Effervescent Preparations" are treated from an English viewpoint on page 220.

## A PRIZE COMPETITION.

NOTWITHSTANDING the occasional appearance of a notice that some "advanced" pharmacist has decided to abandon all side lines, including even proprietary remedies, so as to devote his exclusive attention to the strictly pharmaceutical side of his calling, the fact remains that "side lines" are a very important factor in the business of at least some 20,000 of the druggists of the United States.

While there is money to be made by the judicious introduction of a side line, much care and thought must be expended in selecting goods which are properly suited to the class of trade which patronizes the store, and which at the same time do not involve too large an investment.

With a view to eliciting the opinions of our readers on this subject, we will offer a prize of \$25 for the best and most practical paper on the subject, giving full details as to the amount of capital required and the best methods of introducing the particular line selected. The writer of the next best paper submitted will be awarded a prize of \$15, and the author of the third in rank of merit will be awarded a prize of \$10.

It is desired that the subject selected by each author be treated from a practical business standpoint, so as to give all the information requisite for one to be able to take up the line treated of without further investigation.

Manuscripts should be addressed to the Editor of the AMERICAN DRUGGIST, 65 West Broadway, New York.

## THE SYNOPSIS OF PHARMACY LAWS.

THE excellent work done by Prof. J. H. BEAL of Scio, Ohio, as a member of the Committee on Legislation attracted general attention at the Denver meeting of the American Pharmaceutical Association, and it was while discussing that meeting, just after its adjournment, that the editor of the AMERICAN DRUGGIST requested Professor BEAL to put in shape for publication an abstract of the

pharmacy laws of the United States which he had then in contemplation.

Press of professional duties made it impossible for Professor BEAL to complete the manuscript of this valuable compilation until quite recently, and the first installment of the synopsis appeared in our issue for March 25. A second installment appears in this number, and its publication will be continued until the laws of all the United States and of British America are presented in abstract.

## RETAIL DRUGGISTS AND THE LIQUOR BUSINESS.

THE enactment of a law in the State of New York under which druggists cannot sell liquor at all save on prescription, and under which they will have to pay for this privilege license fees varying from \$10 to \$100, according to the size of the city in which the business is carried on, has directed special attention to this phase of the druggist's business. In our news columns will be found reports from various sections concerning the relations of the retail drug trade toward the sale of liquors, and it is interesting to observe that in Pennsylvania, where the high license law has excluded the retail druggists from participation in the liquor trade, there appears to be a practically unanimous sentiment in favor of a continuation of the present condition of things and in opposition to the sale of liquor by pharmacists at all.

Throughout New York State it is true that considerable annoyance is manifested by the drug trade at the passage of the Raines bill, but it is quite likely that a considerable portion of the discontent expressed is that which is naturally felt with any measure which changes the existing condition of affairs, thereby necessitating some care and trouble upon the part of those most directly interested. By placing the prescription license at \$75 for Brooklyn and \$100 for New York City, the Legislature has practically debarred the State from any hopes of obtaining any revenue whatever from the drug trade, for the probabilities are

that not half a dozen prescription licenses will be taken out altogether, whereas, had the fee been placed at some reasonable figure, say \$10 to \$20, a large number of druggists would have taken out the license as a matter of convenience, even though they could not hope to sell enough liquor on prescription to enable them to pay this amount of license. The imposition of the tax of \$100 is absolutely prohibitory, for we doubt if there is any druggist in the United States who receives in the course of a year prescriptions for liquors which when filled at regular prescription rates would amount in the aggregate to even as much as \$50.

Under the existing statutes the druggists are required in New York State to take out licenses for dispensing liquor on prescription, but the law is practically a dead letter, as comparatively few druggists have ever taken out such licenses, though we have no doubt that many have unhesitatingly filled prescriptions for liquor without being in possession of even a State liquor license. In Brooklyn, for instance, with 458 druggists in business only 88 took out prescription licenses.

#### IN MASSACHUSETTS.

In Massachusetts the license fee for druggists has been merely nominal, and the privileges granted as to the sale of liquor have been liberal—so liberal, in fact, that, notwithstanding the earnest and conscientious efforts of the Board of Pharmacy to prevent it, they have been abused.

The Massachusetts Board of Pharmacy, it will be remembered, has, in a sense, supervision over liquor licenses for pharmacists as well as over pharmaceutical licenses, for a liquor license may not be issued to any pharmacist who is not recommended by the board as a proper person to hold such license.

While there is much to commend this plan, it seems not to have been wholly successful in practice, for, on the one hand, the board, in view of the moral responsibility resting upon it, desired more power to enforce its own decisions, while on the other the unsuccessful applicants for licenses succeeded in arousing considerable resentment among some members of the calling against what they termed the outrages on justice perpetrated by the board in its endeavor to weed out the objectionable element among the license holders.

The new liquor law for this OHIO. State, referred to at some length in our news columns, will have a tendency to place the drug trade on about the same plane as regards the sale of liquor as is now occupied by it in Pennsylvania, and the city druggists interviewed do not make serious complaint, though the law will probably prove most particularly objectionable to the country druggists.

The fact of the matter is that druggists, and city druggists especially, can very well do without selling liquor at all, and considering the amount of opprobrium which has attached to the drug trade from the occasional abuse of the privilege of selling liquors by unworthy persons, who have made a respectable calling a cloak for the conduct of a surreptitious saloon, it would seem that high license will in the end prove beneficial rather than detrimental to the drug trade.

#### PHARMACY LAW

##### IN MARYLAND.

THE draft of a pharmacy law to apply to the entire State has again been defeated in the General Assembly of Maryland. The successful operation of the law which has been enforced in Baltimore, the only city in Maryland that is protected by a pharmacy law, has stimulated the progressive pharmacists and the State association to endeavor to have a State law passed by the last several Legislatures, but so far without success. The failure this time was largely due to premature action by the committee having the law in charge.

They presented a draft that was defective, and it was necessary to then prepare a new draft of the bill. While the delay is to be regretted, yet the committee are to be congratulated in having finally formulated a draft that is more perfect than any previously presented. It is proposed to keep a copy of the present draft, which doubtless would have passed had it not been for the delay; and, through the influence of the Maryland State Pharmaceutical Association, make its provisions known to all the pharmacists in the State, and thus secure for it a hearty co-operation and united effort that will influence the next Assembly to grant the desired object.

Pharmaceutical laws should be a subject of study by the pharmacists. They should acquaint themselves thoroughly with its provisions and advantages, and whenever the opportunity presents itself impress upon intelligent customers and citizens generally the intent of the law, insisting that they, the citizens, are the ones who are primarily benefited by such proper, just and necessary legislation. It is only secondarily that the qualified pharmacist receives protection, and that by avoiding or prohibiting an unfair competition from those who are not educationally qualified to enter the profession. Undoubtedly the low standard of pharmaceutical education in the past has had much to do with the seemingly demoralized condition of pharmacy throughout this country.

Heretofore the effort to obtain a Pharmacy law to apply to the entire State of Maryland has been defeated in each in-

stance by those members of the Legislature who are general storekeepers and by the general apathy of pharmacists in the counties, who have not been well informed on the subject, and who have, in some instances, opposed the law.

In the future it has been decided to educate the pharmacists throughout the State by circulating printed copies of the law, not only among the pharmacists, but among the better class of citizens as well, and by publishing comments on the law in the pharmaceutical and the daily press; and it is hoped that this procedure will prove fruitful of good results.

#### LIABILITY FOR SALE

##### OF WRONG DRUG.

INDIANA is the last of the Central States to hold out against the passage of a pharmacy law, and it therefore sounds rather strange to hear language such as is given below from an Indiana judge. If the statements there made hold true in a State with no pharmacy law, they certainly should hold in other States where there are pharmacy laws.

The case cited is that of *Howes vs. Rose* (42 N. E. Reporter, 808), and in rendering judgment the Appellate Court said:

In view of the dire consequences that may result from the least inattention or want of care or skill, druggists, apothecaries and all persons engaged in manufacturing, compounding or vending drugs and medicines should not only be required to be skillful, but should also be exceedingly cautious and prudent. All persons who deal with deadly poisons, noxious and dangerous substances are held to a strict accountability. The highest degree of care known to practical men must be used to prevent injury from the use of drugs and poisons. It is for these reasons that a druggist is held to a special degree of responsibility. The care required must be commensurate with the danger involved. The skill employed must correspond with that superior knowledge of the business which the law requires.

So, where a wholesale druggist delivers to one engaged in the retail trade a package of tartaric acid labeled "Rochelle Salts," and the retail druggist breaks the package and sells part of the contents as Rochelle salts, the latter will be liable for injury resulting to the purchaser from taking the drug. It is, perhaps, true that an action would lie against the persons who made the first mistake, but it does not necessarily follow from this that the retailer should be excused, if guilty of negligence in making the sale. But actual negligence of the retailer, independent of the *prima facie* negligence shown by the fact of delivery of a wrong drug, must be shown—that is, facts constituting negligence must be established, under the rules of law, before judgment can be rendered against him.

A bill is now before Congress rendering the use of the metric system of weights and measures obligatory after a certain date, which should receive the unanimous support of all.



# A Synopsis of the Pharmacy Laws of the United States.\*

## A Summary of the Principal Provisions of the Various Laws Pertaining to the Practice of Pharmacy.

BY J. H. BEAL,  
Scio, Ohio.

**T**HE object of the following papers is to present in a form convenient for reference, and free from legal verbiage, the principal features of the several pharmacy laws of the American Union, the provisions chiefly referred to being as follows: The dates of enactment and amendment of the laws and the extent to which they apply over the State. The constitution and selection of the examining boards, their revenues, powers, and compensation; the grades of licenses issued, the legal qualifications of licentiates, and the credit allowed for diplomas in medicine and pharmacy; and the fees for registration and renewal, provisions affecting adulterations, the labeling of poisons, etc.

*Unless otherwise expressly stated in the abstracts given it is to be understood:*

1. That each law applies territorially to the entire State which enacted it.
2. That the style of the examining board is simply Board of Pharmacy or State Board of Pharmacy.
3. That the number of years for which the members hold office is equal to the number of members on the board, i. e., if the board has five members the term of office is five years.
4. That the statutory titles of the licentiates are Registered Pharmacist and Registered Assistant, or Assistant Pharmacist.
5. That the certificates of other boards and diplomas of colleges of pharmacy and medicine are not recognized by the law.
6. That there is no statutory requirement of age and experience.
7. That no renewal of registration is required.
8. That the Pharmacy Act does not prohibit adulterations nor require the labeling of poisons.
9. In general that when the abstract does not mention any particular subject, it is because the pharmacy law is silent upon the point in question.
10. That certain provisions uniformly present in all the laws are omitted, such, for example, as the provision for the registration without examination of those engaged in pharmacy at the time of enactment of the law. Such provisions are of temporary and local interest only and would occupy space without imparting information.

In order to avoid needless repetition, the following general forms of poison and label laws are given, and are referred to by number under the States which have the same or similar provisions:

### General Form of Poison and Label Law.

#### FORM NO. 1.—Schedule A.

Arsenic, and its preparations, corrosive sublimate, white precipitate, red precipitate, red mercuric iodide, potassium cyanide, hydrocyanic acid, strychnine, and all other poisonous alkaloids, and their salts, essential oil of bitter almonds, opium and its preparations, excepting paregoric and other preparations of opium containing less than 2 grains to the ounce.

#### Schedule B.

Aconite, belladonna, colchicum, conium, nuxvomica, henbane, savin, ergot, cotton root, cantharides, crocote, digitalis, and their pharmaceutical preparations, croton oil, chloroform, chloral hydrate, zinc sulphate, mineral acids, carbolic acid and oxalic acid.

The articles contained in both schedules must be labeled, both on the container and on the outside wrapper, with the name of the article, the word "Poison," and the name and place of

business of the seller. Nor may any such article be delivered until it has been ascertained that the purchaser is aware of its poisonous character and desires it for a legitimate use. In addition to the preceding, when any article in Schedule A is sold an entry must be made in a book kept for the purpose, stating the date of the sale, the name and address of the purchaser, the name of the article, the purpose for which it is to be used, and the name of the dispenser. This record must be preserved for at least five years. The requirements as to labeling and recording do not apply to poisons dispensed on physicians' prescriptions, when not in unusual quantities or doses.

#### FORM NO. 2.

The same as No. 1, except that all named poisons are embraced in one schedule and that the recording of the circumstances of the sale is not necessary.

Variations from the above forms are noted under the laws in which they occur.

It should also be remembered that the synopsis purports only to give the provisions of the "Pharmacy Act" itself. The criminal code of the State may contain other laws affecting the practice of pharmacy, or the State Board may have rules fixing fees less than allowed by the statute, or requiring age and experience when the law does not. In only a few laws are such facts referred to.

Some of the laws are so loosely drafted as to leave the meaning of certain provisions in doubt. In such cases the writer has adopted that interpretation which seemed to him most probable.

In some instances the date of enactment could not be obtained, and in the case of a few others the dates given are open to doubt. The writer will be thankful for the correction of any errors which he may have made. The writer desires also to express his obligations to the Secretaries of various boards, for courtesies shown, and to Caswell A. Mayo, Editor of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, for assistance in procuring copies of the laws and for revising the abstract of the laws of New York.

### Delaware.

Enacted 1883. Amended 1887, 1889, 1891, 1898. The act applies only to stores located "within the corporate limits of towns."

The Board of Pharmacy consists of five members, three of whom shall be graduates of reputable colleges of pharmacy and two to be graduates in medicine, and are appointed by the Governor from nominees presented by the Delaware Pharmaceutical Society. The members receive their actual expenses out of the money received by the Board, but are required by the law to serve without compensation. Meetings are held quarterly.

The grades of licentiate provided for are registered "proprietor" or "manager," and qualified assistant. The latter must be 18 years of age.

To be registered by examination as proprietor or manager, the candidate must have had "three years' continuous practical experience." Graduates of colleges of pharmacy or medicine are entitled to register as proprietor or manager without examination.

Physicians registered as pharmacists, if they practice medicine outside of their stores, must keep in their employ either a qualified assistant or a graduate in pharmacy. This last provision applies only to the city of Wilmington.

From the language of the statute it appears that any one may be registered as an assistant who has "had three years' continuous practical experience in the retail drug business."

The fees for both grades are, for registration by examination, \$5; for registration without examination, \$1.

The pharmacy act does not require the labeling of poisons, but it is required that a record be kept of "all sales of strychnia, arsenic and corrosive sublimate."

The law is indefinite in regard to the sale of proprietary articles. In Section 1 it is stated, "Nor shall the sale of patent, quack or proprietary articles be lawful, except in regularly licensed stores," and in Section 11, that "Nothing in this act shall prohibit the sale of standard proprietary medicines by general stores."

Fines recovered for violations of the act inure one-half to the Board of Pharmacy and the remainder to the county where the conviction is had.

### District of Columbia.

Enacted by Congress 1878. The Commissioners of Pharmacy, consisting of three pharmacists and two physicians, are appointed by the Commissioners of the District of Columbia. The board is newly appointed every two years, and determines the time and place of its meetings. The members are required to serve without compensation, but are authorized to apply the money received from registration to the payment of their expenses.

There is but one grade of licentiate. To register by examination the applicant must be 21 years of age and either have four years' experience or be a graduate of a respectable medical college.

Graduates of incorporated colleges of pharmacy which require four years' experience before granting a diploma are registered without examination.

\*The abstracts of the laws of Alabama, Arkansas, California, Colorado and Connecticut were printed in the issue for March 25.

The fee for registration by examination is \$10, without examination \$3.

The pharmacist is held responsible for the quality of drugs and medicines supplied by him, except when sold in original packages, and "patent medicines." Intentional adulteration is prohibited, and punishable by fine and revocation of registration.

The section relating to poisons corresponds to Form No. 1.

Except as to the labeling of poisons, the law does not apply to wholesalers.

Itinerant venders of medicines or appliances, or persons who publicly profess to cure any injury, disease or deformity, by medicines, appliances or other expedients, are required to pay an annual license fee of \$200.

Recovered penalties inure to the District of Columbia.

### Florida.

Enacted 1889. Applies only to towns of more than 200 inhabitants, and within a radius of 2 miles of such towns.

The Board of Pharmacy consists of five members, selected and appointed by the Governor. The State Board has power to create "auxiliary boards." The term of office is four years. Five hundred dollars per year of the receipts are appropriated for expenses. All surplus above this amount is to be divided equally between the State and the State Pharmaceutical Association.

Examinations are held whenever ten or more candidates make application.

There is but one grade of licentiate. Graduates of schools which require four years' experience before granting a diploma and qualified physicians are registered without examination.

Unregistered persons may sell "patent and proprietary medicines in original packages."

The fee for examination and registration is \$3; for registration without examination, \$2.

The section regulating the sale of poisons corresponds to Form No. 2, with the addition to the list of veratrum.

The pharmacist is held responsible for the quality of goods, except for those in original packages and proprietary articles. Intentional adulteration is punishable by fine and revocation of certificate.

Itinerant venders of medicines or appliances for the cure of disease are required to pay an annual license fee of \$500.

Except as to the labeling of poisons, the law does not apply to wholesalers.

### Georgia.

Enacted 1881. Amended 1889 and 1891.

The board consists of five members, appointed by the Governor from nominees presented by the Georgia Pharmaceutical Association. The board is authorized to retain all receipts for licenses and one-half of fines recovered for its expenses and as compensation. It may also retain \$600 from the receipts for annual renewals, the remainder of the latter fund to be paid to the State association. At least one meeting must be held yearly.

There is but one grade of licentiate, known as pharmacist or druggist. Licentiates not graduates in medicine or pharmacy must have three years' experience under a licensed pharmacist. Graduates of medical colleges or colleges of pharmacy are excused from the experience requirement, but are not regis-

tered without examination. The board may, at its option, register licensees of other States. Graduates of medical colleges in good standing, who had been in practice five years preceding the enactment of the law, are registered without examination.

The fee for examination and license is \$5, with an annual fee of \$2. In addition to the State license, the druggist must register his name, nationality and credentials with the ordinary of the county in which he desires to practice. For this there is an additional fee of 50 cents.

General merchants may vend "family medicines not poison."

Adulteration is prohibited, and an article declared adulterated:

1. If, when sold under or by a pharmacist, name, it differs from the pharmacopoeial standard.

2. If, when sold under a name not recognized by the U. S. P., but which is found in some other standard work, it differs materially from the standard of such work.

3. If its strength, quality or purity falls below the professed standard.

The Board of Pharmacy is authorized to take samples of suspected articles and to procure their analysis. In all cases of prosecution under the pharmacy act the burden of proof is put upon the accused. Other provisions of importance to Georgia pharmacists are found in the criminal code and in other acts, as the following:

The poison law corresponding to Form No. 1.

All preparations of morphine must be wrapped in scarlet paper and bear a scarlet label in white letters.

It is unlawful to furnish opium or any preparation thereof containing more than two grains to the ounce to any person, after receipt of a written notice from a near relative that such person is habitually addicted to its use, except upon the written prescription of a physician setting forth the necessity of the purchase.

By a section of the general code, one who knowingly or carelessly sells to another adulterated drugs or liquors is liable for any injury they may cause to his person or property.

### Idaho.

Enacted 1887 (?).

The County Commissioners of each county appoint three reputable and practicing pharmacists, who constitute the Board of Pharmacy for that county. Each board must meet twice annually, and make an annual report to the County Commissioners. The members receive \$3 per day for their services, and their necessary expenses.

Two grades of licentiates are provided for. The first grade are known either as graduates or as licentiates in pharmacy, the second as assistants. (According to the copy received by the writer, a graduate in pharmacy is one who has had four years' experience in a drug store, or is a graduate of a school of pharmacy approved by the board.) Licentiates in pharmacy are such as have two years' experience and have sustained a satisfactory examination. In towns of less than 500 inhabitants the board may grant "minor certificates" without examination to such persons as have had two years' experience. The holder of a minor certificate is entitled to registration as assistant in towns of over 500 inhabitants. The board may at its option

grant registration to licentiates of other boards.

The fee for registration by examination is \$10; for registration without examination, \$5. There must be an annual renewal of registration, the fee for which is fixed by the board, but may not exceed \$5.

General merchants may sell the "usual domestic remedies," proprietary medicines in sealed packages, bearing the name of the pharmacist or physician by whom compounded, and strychnine or phosphorus and their preparations when in sealed packages bearing the name of the pharmacist or physician by whom compounded, and sold as vermin killers. The merchant must, however, keep a record of the dates of sales and the names of purchasers.

The pharmacist is held responsible for the quality of goods supplied, except when in the original packages of the manufacturer, or in the case of proprietary articles. Intentional adulteration is punished by fine and revocation of registration.

The section regulating the sale of poisons corresponds to Form No. 2, except that it omits colchicum, henbane, safin, ergot, cotton root, cantharides and mineral acids, and includes laudanum, morphine, sugar of lead, cocaine, and "any poison commonly recognized as such." It is also required that the circumstances of the sale be recorded and the record attested by the signature of the purchaser. Wholesalers are exempted from the act, except as to the sale of poisons.

Penalties collected under the act inure one-half to the board and the remainder to the school fund.

### Illinois.

Enacted 1831. Amended 1899 and 1895.

The board consists of five members, appointed by the Governor from nominees presented by the State Pharmaceutical Association. The secretary receives a salary fixed by the board, but not to exceed \$2,000 and his expenses, the other members \$5 per day and expenses.

Wholesale dealers are specially excepted from the operations of the act.

The law provides for three grades of licentiates—registered pharmacist, registered assistant pharmacist and registered apprentice.

Registered pharmacists by examination must be 21 years of age and have four years' experience. Physicians of four years' experience in the compounding of their own prescriptions may be examined without the experience qualification.

The board may, at its option, register licentiates of other States, provided the standard of such States be equal to that of Illinois.

Persons having five years' experience and 21 years of age may register without examination, but the licensee may practice only in the particular place or locality for which the license was granted, and in no other. Registered assistants must be 18 years of age. Those who have had three years of store experience may register without examination, the time of attendance at a respectable school of pharmacy being deducted from the period of experience. Applicants without experience may register as assistants by passing an examination that shows competency or qualifications equal to three years' experience.

A pharmacist who takes an apprentice must report such facts concerning his schooling, etc., as the board may require, whereupon the board issues a certificate of registration as apprentice.

Every applicant for registration, either as pharmacist or assistant, must pay a fee of \$5. Apprentices are registered without charge. The annual renewal fee is \$1.50 for registered pharmacists and \$1 for assistant pharmacists.

The board may revoke the licenses of persons addicted to the excessive use of stimulants or narcotics.

Registration is not forfeited by failure to pay the annual renewal, nor by retiring from practice for a period not exceeding five years.

The board may at its discretion issue permits to unlicensed persons in villages to sell such articles as the permit may

specify, and under such regulations as the board may prescribe. The fee for such permit is \$1, and must be renewed annually at a cost of 50 cents.

Every package of drugs, medicines or poisons sold at retail must bear a label with the name of the article and the name and place of business of the registered pharmacist from whom obtained. If it is of a poisonous nature it must be labeled as such. Sales of arsenic, strychnine, corrosive sublimate and prussic acid must be recorded. Physician's prescriptions are excepted from these provisions.

Willful adulteration or substitution is forbidden, and the board may on complaint have the article analyzed and procure the prosecution of the offender.

All penalties recovered under the pharmacy act inure to the board.

Tannalbin is an albuminate of tannin prepared by Knoll & Co of Ludwigshafen, which is very soluble in the gastric juices when fresh, but soluble only with difficulty when dry. It dissolves, however, in the alkaline secretions of the intestines, liberating the tannin, which is in certain conditions very valuable as an intestinal astringent. Tannalbin is a yellowish, odorless, tasteless powder; it contains 50 per cent. of tannin, which does not act at all in the mouth or stomach.

**Clear Solution of Cocaine and Corrosive Sublimate.**—Carcano produces a clear solution of corrosive sublimate and cocaine hydrochloride by proceeding as follows: Place 7 grams (110 grains) of glycerin in a 1 ounce graduate and add a hot solution of 0.2 grams (8 grains) of corrosive sublimate and 0.75 grams (12 grains) of sodium chloride in a little water. Then add 0.10 grams (1½ grains) of cocaine dissolved in 8 or 10 grams (2 or 3 fluid drams) of water and dilute to 20 grams (6 fluid drams) with water.

**Preparation of Sodium Boro Salicylate.**—Heat in a flask connected with a condenser 700 gm. of water, 125 gm. of boric acid and 320 gm. sodium salicylate. The syrupy liquid solidifies upon cooling, and when dried on flat plates a white mass is obtained. Sodium boro salicylate is a powerful antiseptic and is soluble in 8 parts of water at 40 degrees C., and is also soluble in ethyl-methyl and amyl alcohol, in acetic ether, in glycerin and in acetone. It is, however, insoluble in ether. —*Moniteur de Pharm.*

**To Prepare an Aqueous Solution of Thymol.**—Hermate (*Sen Med*) proposes the following formula: Dissolve 1 gm. (15 grains) each of thymol, tartaric acid and caustic soda in a small quantity of lukewarm water, and then add sufficient water to bring the whole up to 2 liters (4½ pints). In commenting upon the above, Arthur Schwarzkrock of Dresden states that the addition of a small quantity of glycerin to an alcoholic solution of thymol rendered it possible to dilute this solution very materially with water without causing precipitation.

**To Thaw Out Frozen Water Pipes.**—Place unslaked lime around the pipe; cover with straw, and then pour on water. The heat generated by the slaking of the lime will thaw out the pipe if the operation is properly carried out. Pipes may also be protected from freezing by first wrapping with straw, then putting on a layer of unslaked lime, and finally again covering with straw. The gradual slaking of the lime by the moisture of the atmosphere evolves sufficient heat (*Neust. Erf. und Erf.*) to prevent water pipes from freezing for a whole season.

**Ipecacuanha in Bee Stings.**—The *Indian Medical Gazette* calls attention to the valuable properties of ipecacuanha in the treatment of the stings of bees. A Calcutta physician who was attacked by a swarm of bees was severely stung by the swarm on the hand, head, face and neck, no fewer than 150 stings being afterward taken from his neck. Fortunately he had some ipecacuanha powder with him which he immediately had made into a paste and smeared over the head, face and neck. The effect of the ipecacuanha was most marked, preventing to a large extent the swelling and pain which invariably follow the bee's sting.



**Balsamic Pill Coating.**—Cocks uses for varnishing pills a mixture of equal parts of tincture of tolu, mucilage of acacia, and simple syrup.

**Water Soluble Petroleum Oil.**—What is termed a water soluble petroleum oil has been placed on the market in Germany, and is said (*Phar. Zeit.*) to consist of a petroleum oil into which has been added a small quantity of ammonium oleate. This salt is decomposed on heating and the emulsion formed by its aid is then broken up.

**Why Lamp Chimneys Break.**—Chappe states that the pulverulent deposit which occasionally makes its appearance on lamp chimneys just above the contraction on the chimneys and which makes them very brittle, consists of sodium sulphate. He explains that it is formed by the action of the sulphuric acid, left in the oil in the process of purification, upon the soda of the glass.

**Actol and Irol** are the names given by Dr. Credé to silver lactate and citrate respectively. Both are powerfully antiseptic, but the lactate is somewhat irritating when applied to the mucous membranes, and is very sensitive to light. Irol, the citrate, is not irritating, though possessing all the antiseptic value of actol, and is recommended by Credé as an innocuous and valuable antiseptic for dressing wounds.

**Preparation of Nitrites.**—Goldschmidt has patented, in Germany, a process (*Pharm. Centralhalle*) for the production of nitrites, which consists in heating nitrates with formiates in the presence of a free base. Since the formiates are formed by the action of carbon-dioxide on the free basis, the process can be changed by heating the mixture of a nitrate and a free base in a stream of carbon dioxide.

**Adulteration of Codeine.**—Etivevant (*Annales de Pharm.*) has found in commerce a codeine which leaves an insoluble residue when treated with alcohol, which is soluble in water. The aqueo-alcoholic solution has a sweet taste, in consequence of the presence of sugar, which very much resembles the genuine subject itself. Fehling's solution is only reduced, of course, after the inversion of the sugar with sulphuric acid.

**Colorless Apomorphine Solution.**—A correspondent of the *Pharmaceutische Zeitung* states that he has found that a comparatively slight rise in temperature would invariably produce a red coloration in solutions of apomorphine, but that he had no difficulty in preserving them free from color by preparing a 1 per cent. solution with the aid of a few drops of hydrochloric acid and then keeping the solution in a cool place.

**Purified Manna.**—Manna may be purified (*Pharm. General Anzeig*) by treating the solution with animal charcoal, the solution having first been cleared by skimming, filtering off, evaporating the filtrate to a thick consistence, and pouring into molds or spreading out on plates and allowing to dry in thin sticks. Very attractive forms for the molds may be made by dissolving out the soft part of cuttlefish bone, by laying the bones in very dilute hydrochloric acid.

**Gelatin Coating for Pills.**—Cocks recommends the following solution as producing a coating which shows the color of the pills very clearly, and at the same time is very soluble in the stomach:

	Grams.
Gelatin.....	74
Boric acid.....	7.5
Mucilage of acacia.....	60
D. still'd water, sufficient to make.....	210

**Material for Drying Apparatus.**—Heinrich Kral has long used a mixture of dried calcium chloride and freshly burned lime (*Pharm. Centralhalle*), which he finds to last much longer than calcium chloride alone. Partial regeneration by heating is not feasible in this case on account of the presence of lime, but this is of very small consequence on account of the low cost of the ingredients. He has also used fused potassium bisulphate in place of sulphuric acid in drying apparatus, and with the same results as accomplished by the acid, but with the advantage that there is no danger of the contents of the dryer being spilled as there is when the acid itself is used.

**Royères Test for Distinguishing Mineral from Vegetable or Animal Oils.**—Halpen has made experiments with Royères decolorized fuchsin test and the results (*Rep. de Pharm.*) tend to discredit its value. The test consists in adding to a few drops of the suspected oil two drops of a solution of fuchsin which has been decolorized by the addition of sulphurous acid. If an animal or a vegetable oil be present, a color should be developed. Since the appearance of the color is only due to the presence of acid, there is a possibility of the results being misleading, as traces of acid are a frequent impurity in mineral oils. The presence of a soap, on the other hand, would counteract the influence of the presence of free acid. Rosin oil also.

**The Separation of Morphine and Cocaine.**—In forensic cases these two alkaloids may be separated (*Pharm. Zeit.*) as follows: Add sufficient sodium carbonate to the aqueous or acid solution to render it slightly alkaline, and shake out at once with ether, and separate the ether off by means of a separatory funnel, and repeat this several times, when the ether will be found to contain all the cocaine. The morphine can be obtained from the alkaline solution by repeating agitation with amyl alcohol, and then evaporating the alcohol. Before extracting the morphine, however, the traces of ether left in the aqueous solution should be driven off and the solution then treated with ammonium chloride, after which the morphine may be readily removed.

**Phenocoll in Whooping Cough.**—Dr. A. Martinez Vargas, Professor of Pediatrics in Barcelona (*Therap. Woch.*, January 5, 1896), employed the phenocoll treatment of whooping cough in 42 cases during the period from February, 1894, to June, 1895, and he declares that it is far superior to any other remedy for that disease that he has ever tried. In every one of his 42 cases its effect was shown within the first 12 hours, although in many of them the frequency of the paroxysms was not reduced until the next day. Even in children of a very tender age he has not observed any untoward action of the drug. He gives the hydrochloride in daily amounts of from 1 to 80 grains, according to the patient's age; he has always used it dissolved in water to which sugar or gum arabic has been added. He remarks that it is absorbed very rapidly and eliminated promptly. He thinks that the efficiency of phenocoll hydrochloride in whooping cough is not due to its antibacterial action, but to its acting as a sedative.—*New York Med. Journal*.

**The Estimation of Emetine in Ipecacuanha.**—A. Mendini describes the following process (*Bolletino chimico-pharm.*) for the estimation of emetine in

ipecacuanha, and was well satisfied with the results. Ten gm. of the powdered root to be examined is treated with ammoniated chloroform in a Soxhlet apparatus until no further reaction is obtained with Mayer's reagent. When properly conducted this operation requires about 80 hours; the chloroform is filtered off, and the moist residue is treated with 10 ccm. of water acidulated with hydrochloric acid, the solution filtered with the help of an aspirator (the filtration otherwise is very difficult), and the residue washed with a few drops of water. The filtrate is precipitated with ammonia, the precipitate dried at 100 degrees C., collected on a tarred filter, washed with from 4 to 5 ccm. of water, again dried at 100 degrees C., and weighed. By this process Mendini found 2.11 per cent., while Kokmayer found 2.27 per cent. of emetine in the same sample, according to the method of the Italian Pharmacopoeia.

**Durability of Sublimate Dressing.**—E. Battle and Chavigny have examined a number of the packages of dressings which were brought back by the French troops from their expedition in Madagascar, with a view to determining the effects which the exposure to the hot and moist climate of that country had upon the sterility of the dressings and upon the sublimate contents. They found that gauze and absorbent cotton which had originally contained 1 part of sublimate in 1,000 had deteriorated, so that there was but 1 part in from 1,500 to 2,000; whereas the water proof dressing contained a much higher percentage of the sublimate than when originally sent out, running from 1 to 500 to 1 to 272. The authors offer no explanation of this startling result. The entire amount of mercury left in the dressings was found to be in the form of sublimate, and therefore still in a condition to be of antiseptic value. The authors conclude, however, that the amount of corrosive sublimate present is too small to begin on. The dressings used in the German army contain from 4 to 5 parts of this antiseptic in each thousand.

### The Glacial Acetic Acid Test for Gurjun Balsam in Balsam Copaiba.\*

BY LYMAN F. KEBLER.

In the August number of this journal I reported on the efficacy of the above test. The test, as outlined there, is a modification of the original one. In the original test, the balsam copaiba is dissolved in the glacial acetic acid and the nitric acid then added to the mixture, while in the modification the nitric acid is mixed with the glacial acetic acid, and the balsam carefully added to this mixture. I also take note of the zone of contact; this renders the modification test more delicate than the original. This note is presented here because it is maintained that the test as modified is too delicate. Thus far I have failed to secure a genuine sample of balsam copaiba that responded affirmatively with this test. I requested the party who informed me concerning the shortcoming of the modified test to forward me a sample of the genuine balsam copaiba with which this test indicated gurjun balsam. Thus far

\* *Am. Jour. Pharm.*, 67, 304.

† *AMERICAN DRUGGIST*, 27, 5.

I have not received it, and probably never will. Any reader meeting with such a sample of balsam copaiba will do me a great favor by sending a portion to me.

### Dispensing Queries.

BY H. M. BINDLOSS.

In opening his remarks, the author said that there were usually supposed to be two ways of doing everything, but in dispensing a bottle of mixture or a pot of ointment there may be several ways—all different—and all probably correct, and it was on account of there being many ways of arriving at a correct result in dispensing that his notes would be particularly open to criticism and discussion.

First, he called attention to the advisability of some rule being established as to the style of bottle gargles, throat sprays, etc., should be dispensed in. He was strongly of the opinion that an intermediate bottle between the blue fluted poison bottle and the white glass dispensing bottle should be used for such preparations, the reason of his opinion being as follows: If a dispenser treated a gargle or throat spray as he would a lotion and sent it out in the usual blue fluted bottle a patient would naturally hesitate before following such directions as "To be used freely," or "Use frequently," and then, on the other hand, if he treated the gargle or throat spray as a mixture and sent it out in a clear bottle, exceptions would certainly have to be made to the rule in prescriptions like the following:

R Hydrarg. perchlor.....grs. ij  
Glycerin..... 3j  
Solve.

"The throat to be painted at bedtime."

Therefore, if an intermediate bottle were used, it would obviate that irregularity which we so frequently come across with patients who are traveling from one town to another; as this could be used for all medicines which are taken into the mouth or nostrils, but not into the stomach, and would include, of course, all gargles, spray solutions, throat paints, mouth washes, and applications for tongue, nostrils and gums.

All applications not being intended for the mouth or nostrils would be dispensed in the ordinary blue poison bottle.

In this way a fast rule could be made; only those medicines which are actually swallowed being treated as mixtures, and the patient would then get his remedies dispensed always in the same style.

Mr. Bindloss next pointed out the advisability of always attaching a "shake the bottle" label when dispensing an alkaloid liquor in a mixture containing an alkali. This he stated was a safe rule, and one that should always be observed; at the same time it was well to remember that most alkaloids are slightly soluble in water, for instance, morphine, 1 in 1,000; strychnine, 1 in 7,000, which meant that 6 ounces of water are capable of dissolving all the strychnine contained in 40 minims of the official liquor, and all the morphine in 280 minims of any of the official morphia liquors, even supposing it were all deposited; therefore, as far as actual necessity goes, liquor morphine seldom requires a "shake" and liquor strychnine only occasionally.

\* Read at a meeting of the Midland, England, Chemists' Assistants' Association.

He then drew attention to the mistake in ointment pots being made to contain avoirdupois instead of troy ounces, for to dispense a prescription for 1 ounce of ointment in most cases a 1½-ounce jar would be required, his opinion being that all ointments should be weighed, and then the smallest jar chosen that would hold that quantity.

He also made reference to a note on "Mist. Ferri Co.—a Wrinkle," which appeared in the previous week's *Pharmaceutical Journal*, which was as follows: "Dissolve the sugar with the iron sulphate instead of mixing it with the myrrh and carbonate of potash . . . the emulsion of myrrh, carbonate of potash and rose water being more easily formed, and more milky without the sugar."

This method he could not agree with, for the following reason, viz.:

1. Sugar has, without doubt, remarkable power in extracting and diffusing the aromatic fragrance of the myrrh when in contact. Its power is noted in a similar way with tolu, lemon and many other odorous drugs. A vanilla bean (Mr. Ince said recently), immersed in powdered sugar, diffuses its aroma throughout the whole mass. The better the myrrh the greater, therefore, is the necessity of using the sugar.

2. If lump sugar be used (which he recommended) the myrrh can be powdered quicker and finer and the resulting emulsion is better than that by omitting the sugar.

His experience, he stated, led him to think that sugar did not in any way interfere with a gum resin emulsion.

In conclusion, he handed round copies of several prescriptions having slight peculiarities which had come under his notice.

## No. 1.

℞ Quin. sulph. . . . . gr. 1½  
Ac. hydroch. dil. . . . . ℥v  
Am. carb. . . . . gr. v  
Aq. chlorof. . . . . ad. 3 j

The only satisfactory way of dispensing this, he said, was to neutralize the acid with the am. carb., rub down the quinine with mucilage, and add one to the other.

## No. 2.

℞ Bismuth. carb. . . . . gr. 120  
Potass. bicarb. . . . . gr. 90  
Spt. am. arom. . . . . 3 iij  
Tr. cardam. co. . . . . 3 iij  
Aq. calcis. . . . . ad. 3 viij

The color of the tinctur. card. co. in above being discharged.

## No. 3.

℞ Liq. potasse. . . . . ℥ss  
Spt. etheris nit. . . . . 3 j

This acquires an amber color with a slight precipitate.

## No. 4.

℞ Zinc. brom. . . . . gr. 16  
Sodii brom. . . . . 3 iv  
Tr. nucis vom. . . . . ℥iij  
Aq. . . . . ad. 3 viij

As flocculent precipitate occurred in this, two drops of acid hydrobrom. were sufficient to clear, and, in his opinion, ought to be added.

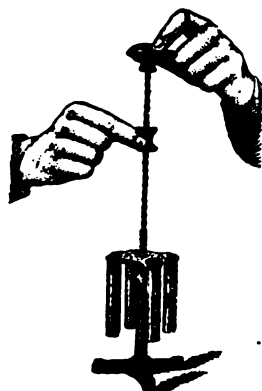
## No. 5.

℞ Cocain. hydroch. . . . . gr. 1½  
Argent. nit. . . . . gr. ¼  
Aq. dest. . . . . 3 iv

In dispensing the above, silver chloride would be precipitated, which he was sure the prescriber did not intend, and, therefore, nitrate of cocaine should be used in place of the hydrochlorate.

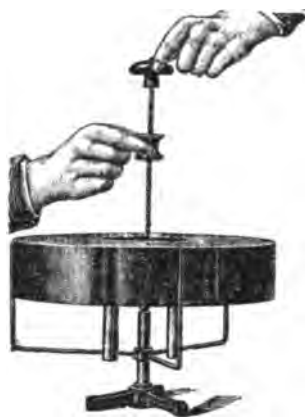
### Centrifugal Apparatus to be Operated by Hand.

In a recent issue of the *Zeitschrift für Wissenschaftliche Mikroskopie*, Dr. Cori describes a simple form of centrifuge, which can be operated by hand. The ac-



CENTRIFUGAL APPARATUS OPERATED BY HAND.

companying illustrations of the apparatus are so clear as to almost render any further description unnecessary. As will be seen from the illustrations, the rotary motion is imparted by moving the center hand piece up and down along the prolongation of the axis of the centrifuge. About 1,200 revolutions per minute can



CENTRIFUGAL APPARATUS WITH COVER.

be obtained by the use of this apparatus. In one of the illustrations a cover is shown which remains stationary, and which will act as a protection in case any accident should occur to the tubes during rotation.

### Recent Changes in the Drug Business.

By W. BODEMANN,  
Chicago, Ill.

About a year ago I was called on to make a little talk at a banquet given—or rather taken—by a local medical society of my city. I responded to the call with some remarks on the subject written above as a title, and the affair passed out of my mind.

A few weeks ago it was recalled by a physician who had been present at the dinner, who asked me if my "address"

had appeared in any of the journals. He expressed the conviction that it contained some solid truths for both professions and should be widely read.

Although not a "talk" of to-day, it is still as "timely" as ever. The conditions it describes are now as they were then—if not more so—and at my friend's suggestion and with the editor's permission I will now repeat to a new and larger audience my "address" (slightly amended) on the occasion referred to.

Had I the gift to speak a sort of short-hand language, I might succeed in doing justice in ten minutes to my subject, "Recent Changes in the Drug Business," but I must confine myself to the pointing out of the head-lines, as it were.

#### CHANGES INDICATED.

Mr. Ebert once left the drug business for a few years, and when he again embarked he told me he felt as if he was once more serving apprenticeship, so great were the changes.

One of the greatest and yet recent changes in our business is this: that up to about a year ago we did some business; now we don't. Most of us are busy paying off debts and discharging one clerk after the other, but, as I understood the gentleman who asked me to speak, I was to talk of the changes since I have been in the business.

I landed in this country in 1867, and my first job was in the then leading drug store in Milwaukee. My salary was \$50 per month; now, as proprietor, I have to pay considerably higher wages and get less work out of two clerks at that price than my boss got out of me for \$50 (I had to sell window glass, oil, paints, putty, etc.—make putty, too—wash bottles, and sweep the floor.) That is one of the very important changes.

#### CONDITIONS TWENTY-FIVE YEARS AGO.

In 1867 the leading drug store of Milwaukee had not one ready-made sugar-coated pill nor a single fluid extract. Since then pharmaceutical manufacturers have sprung up like mushrooms, and our medical friends seem to expect the leading pharmacists of to-day to keep a full line of fluid extracts and pills of, say, a dozen different manufacturers. Then hardly any proprietary preparations were made—hence none prescribed; now, with the habit of prescribing proprietary preparations, has crept in the curse of even patent nostrums being on the list of prescribed items. Not quacks, but regular physicians, deem it perfectly legitimate to prescribe even Piso's Consumption Cure, Trask's Ointment, and Warner's Kidney Cure, remedies of which we know nothing. The same holds true of many things like Antikamnia. The manufacturers either don't say what the remedies contain, or, if they do say so, they make arbitrary changes, and it is hard to believe how a conscientious and intelligent physician can be induced to apply remedies of which he does not know the contents. To what extent you are fooled in this respect I found out only the other day, when the manufacturers of a certain proprietary remedy wrote me that they had recently changed the published formula, but not the preparation itself.

Some 25 years ago it was a common practice with good, reputable druggists to keep a regular account of percentage with their prominent physicians, and settle at the rate of 25 per cent. every month. Now I have no doubt the physi-



cians who take percentage from druggists are very few.

#### PERCENTAGE PHYSICIANS.

Twenty five years ago it was quite usual for people who were inclined to be prohibitionists to get their drinks in the drug store. I was not aware of any druggist at that time who did not sell more or less liquor by the drink. To-day we are proud to say that very few druggists stoop so low as to make a saloon out of a pharmacy. The saloon-keeper, who pays a license and hangs out his shingle, is an honorable gentleman compared with the pharmacist who shirks payment of a license for saloon purposes, and disgraces his profession by saloon practices. The majority of our druggists recognized the truth of this and brought about the most thorough reform through our own efforts.

Twenty five years ago, when I was young and knew a good deal less than I do now—though I thought I knew it all—along with the custom of the day, I treated diseases and prescribed for the sick, without having any qualification whatever. But it was the custom, and I did not think it wrong at all to do as others did. What a change since then! I have conversed on this subject a great deal with other druggists, and I am convinced that prescribing by druggists belongs to the lost arts.

Up to 1880 the State of Illinois had no pharmacy law. Now every pharmacist must be registered. Twenty-five years ago very few druggists had gone through a pharmacy college; now the pharmacist without a college education is the exception.

A few years ago the drug store flourished without a telephone. To-day I am assured that the bulk of the telephone service is done over the wires of the druggists.

If my memory is correct, not 5 per cent. of Chicago druggists had a soda fountain 25 years ago. To day, it is safe to say only 5 per cent. have no fountain. Two per cent. find the soda fountain a source of revenue; to 98 per cent. the fountain is a nuisance and a source of expense.

#### PURE FOOD LEGISLATION.

A few years ago, through the earnest efforts of pharmacists and pharmaceutical associations, several States established food commissions. It is of interest to note that among many arrested under such laws there were several pharmacists, and the ground for their arrest was the sale of obnoxious patent medicines, and for the sake of a test case several druggists were prosecuted who had sold tablets made by a reputable Eastern pharmaceutical manufacturer, said to contain 5 grains of a certain chemical—expensive, of course—that did not contain 2 grains. This should be of interest to our medical friends, who so largely depend on the manufacturing chemists. In this connection, it is well to add that pure food, medical and pharmacy laws need revision and judicious handling more than executive enthusiasm. If abused, as is often the case with new laws, they are worse than none.

#### COMMERCIALISM IN PHARMACY AND MEDICINE.

Professionally we have improved and advanced on the right lines; commercially we have lost ground. I do not know how you have fared professionally, but I do know that you have advanced decidedly in a commercial way, and have

imitated the homoeopathic doctors in their dispensing tactics.

I have succeeded in showing to you that the changes that have taken place in pharmacy have mostly been in the direction of improvement. Can the same be said of medicine? Of course, I except present company, and speak of medicine in its entirety.

Twenty-five years ago homoeopathy was hardly known in Chicago. How is it to-day?

Twenty-five years ago the old-line doctor would have called it a disgrace to prescribe patent medicines. How is it to-day?

Twenty-five years ago a physician carrying a sample box of some manufacturer's ready-made tablet was an unknown quantity. How is it to-day?

I leave the case for your side in your hands and thank you for your courtesy.

### Cod Liver Oil and Its Emulsification.\*

The codfish, said P. C. Arblaster, in a paper read before the Midland (England) Chemists' Assistants' Association, appeared at Bergen, Norway, and further north in the months of January and February, and was then caught in quantities of 6,000,000 to 8,000,000 or more. Later, about March, the fish appeared at Lofoden, where sometimes over 8,000,000 were caught. Yet later, the fish went further north to Finmark, where the catch was quite as large. About 16,000 fishermen congregated annually at Lofoden. The fecundity of the codfish was such that it had been estimated that if only one female fish escaped annually, and her eggs safely hatched, the species would be effectually preserved. This fact was less surprising when it was recollected that the ovary of each female fish contains no less than 9,000,000 eggs. As soon as possible after capture the fish were brought alive in a specially constructed tank to the shore, where they were sold to the tradesmen and manufacturers, or, what happened very seldom, the oil was extracted by the fishermen themselves on board. There were five varieties of cod liver oil, namely: 1, That extracted by means of steam, or steam oil; 2, the ordinary medicinal oil, of a light yellow color; 3, the oil of a dark yellow color; 4, the brown medicinal oil; 5, the dark brown oil used by tanners and curriers to soften and preserve leather and skins.

1. In the preparation of steam oil the livers were subjected to the action of steam in pans, pressed and transferred to closed lead cisterns, where the oil was left to deposit stearin and other impurities. After one or two months the clarified oil was bottled. Merchants drew off the oil at as low a temperature as possible, to avoid stearin being afterward deposited. This oil was almost water-white, and has very little taste or smell. 2. The light yellow oil was prepared by allowing the livers to remain in heaps, when the oil runs out by itself. It was evident that through this exposure to the air, lasting some weeks, the oil got somewhat rancid, and, of course, stronger to the taste and smell than the steam oil. Here, as elsewhere, the difference in the light yellow oils was due to the cleanliness observed and the casks used. Being prepared without heat, this

oil contained very little stearin, and would stand a cold temperature better than the steam oil. Makers of high class oils always kept the oil for some time in icehouses to allow the stearin and palmitine to deposit. 3 and 4. These were the darker yellow and brown medicinal oils, and were prepared by pressing the livers and subjecting them to a low heat. 5. Curriers' oil was obtained by letting the livers ferment, heating and then subjecting to strong pressure.

#### THE EMULSIFICATION OF COD LIVER OIL.

With regard to the emulsification of cod liver oil the author pointed out the many virtues of Irish moss, which contains about 70 per cent. of pectin or vegetable jelly, and had extraordinary powers of emulsification. The only disadvantage in its use was the liability of its solution to ferment under certain conditions; this might be got over by the addition of 5 per cent. of alcohol to the bulk or a small quantity of elixir saccharini, which acted as a powerful anti-ferment as well as a sweetening agent. The formula he had found most satisfactory was:

Irish moss (picked).....1 dram.  
Cold distilled water.....5 ounces.

Allow the water to stand on the moss for one hour; then foil for ten minutes and strain through muslin and make up to five ounces. To this, in a bottle when nearly cold, add:

Cod liver oil.....8 ounces.  
Alcohol.....1 ounce.  
Water, to make.....16 ounces.  
Flavoring.....q. s.

Use a quart bottle, shake the mucilage well round the sides and then add the whole of the oil, and agitate to form a nucleus; then add half the water and lastly the alcohol, flavoring, and as much water as required to make up the quantity.

He could not see why such a preparation as an emulsion made by shaking together equal parts of the oil and lime water, and properly flavored, should not come into general use. The two drugs were separately prescribed largely for rickets and spinal diseases in children, also the presence of lime water would certainly help a delicate stomach to bear the oil. To completely mask the odor and taste of cod liver oil would be worth much gold to any man. He had found oil of wintergreen very useful, though it was not much used in this country. Each of the following three formulæ was sufficient for one pint of the finished product:

I.		Minims.
Oil of wintergreen.....	.....	15
Oil of sassafras.....	.....	15
II.		
Oil of wintergreen.....	.....	20
Oil of bitter almonds.....	.....	20
III.		
Oil of neroli.....	.....	12
Oil of bitter almonds.....	.....	12
Oil of clove.....	.....	2

Oil of lemon appeared to be of little use. Elixir of saccharin he found is very useful in bringing out the taste of the flavorings used.

A fine palatable and nutritious drink can be made with malt extract and soda water. The extract should be made of the consistence of syrup with warm water. About 8 ounces of this in a ½-pint soda water tumbler with carbonated water makes a glorious liquor.

\* The British and Colonial Druggist.

### The Phosphates of Iron and Calcium in Pharmaceutical Syrups.

At a recent meeting of the Glasgow and West of Scotland Pharmaceutical Association, John Black read a paper on "The Phosphates of Iron and Calcium in Pharmaceutical Syrups," in which he said that the earliest memories of even the oldest members of the profession were bound up with the production of phosphate syrups—either Parrish's or Easton's. In the history of Parrish's syrup one recognized something not unlike a prophecy of the changes that had come over the pharmacist's business. When this syrup was manufactured first in Glasgow—about 1855—its wholesale price must have been over 2s. per pound, and the retail price about 1s. 6d. per 4 ounces fluid; now it was bought by the hundred-weight and retailed at 6d. per 4 ounces. In this great fall in price sugar played an important, but unfair competition a much more important part. This syrup is now largely manufactured for the grocery trade, and 8 ounces sell for 6d. The author then dealt with the phosphates of iron and calcium in their relation to Parrish's syrup, estimating the value of the methods of precipitation and direct combination now in use.

#### PARRISH'S SYRUP.

Having quoted Parrish's formula as first published in England in 1859, and referred to the processes of Messrs. Jones, Hewie, Saunders and Martindale, he said that to prevent oxidation by the method of precipitation no one had yet suggested a remedy, and dry ferrous phosphate was still produced by this means, containing about 50 per cent. of protosalt. If it were worth the trouble he thought it quite practicable to produce ferrous phosphate in the dry state, quite pure, by washing with boiling water from which the dissolved oxygen has been expelled in an atmosphere of carbon dioxide. This was an ordinary laboratory expedient for protecting iron solutions from atmospheric oxidation, and required only a Woulfe's bottle arrangement, with a round bottom to admit of tilting if necessary, and heating by a steam jacket. If this method were used in washing ferrous phosphate, he ventured to assert that the iron could be produced entirely in the ferrous condition. It was notorious that the iron in Parrish's syrup produced by precipitation and washing was almost entirely in the ferric state. A great change had passed over the phosphate syrups, however, since precipitation had been abandoned. If a tint of ferric salt was observable in an uncolored syrup like Easton's syrup or syrup of phosphate of iron, it was due only to the fact that a perfect hydrogen atmosphere was not possible, practically speaking.

Lime still precipitated in all phosphate syrups from the difficulty of keeping tricalcic phosphate in solution in quantity over  $1\frac{1}{2}$  gr. per drachm; but in well-made syrup, once this is filtered clear the syrup is permanent. If the sugar be the finest obtainable cane product, the inversion proceeds so slowly, with a normal quantity of free phosphoric acid, that he did not see how a well-made syrup might not be kept for years.

The hydrogen atmosphere Mr. Jones spoke of was, to some extent at least, imaginary. It could not be got by gener-

ating it in an ordinary flask or bottle with a cork. If it could, it would depend largely on the skill and ingenuity of the operator. Of course, if a cork was used it must be rubber, and fit the bottle neck so as to pulsate freely; because if it gained in any way—even with five hours' digestion of the iron with the acid producing it—the hydrogen would be largely replaced by atmospheric oxygen, and it would get below the hydrogen. The use of a valve would obviate this difficulty—not a glass one—but a piece of flexible rubber tubing closed at its upper end, but slit in the center longitudinally to admit of the escape of the hydrogen under pressure from the inside, but closing automatically the moment that was released. This would give the hydrogen a chance of driving out the air during digestion, which any flask or bottle closed by a cork could not give.

He proposed as an improved method to put the whole of the materials together in one flask, and assist the hydrogen by carbon dioxide, which, from its density, would get below the hydrogen, and, before the syrup was run in, would have completely driven out both air and hydrogen, and, if heated to expel excess of carbon dioxide, will have created almost a vacuum before the syrup was run in. By this means chemists would be able to guarantee the strength of their syrups. Parrish's formula was still largely used, however, and so long as the public could buy 8 fluid ounces for  $5\frac{1}{2}$ d. in grocers' stores—which were very dilute solutions of lime and ferric iron—it would continue to be made until medical men insisted on Squire's preparation, which some of them do now. In samples he had obtained, those made by chemists from Parrish's formula showed the calcium phosphate in good quantity, while in those made for grocers the iron was still less in quantity, and the lime was generally merely a film at the bottom, and in some cases only a turbidity, while the iron was nearly absent.

### Preparing Opium in Persia.

By no means a small or unimportant industry in Ispahan is the preparation of opium. Almost every native or European merchant who trades in this drug sees the opium prepared under his own eye. The following is the usual manner of doing this in Ispahan, as described in a recent British consular report:

The people commence to collect the drug early in May. The poppy head is

Special men are engaged who understand the manipulation of crude opium. 1. The opium is taken out of the pots and assorted. It is then put into a very large copper pot (as the quality of various villages give different "touch" and morphia). For this reason they are obliged to mix the bulk together so that all the cakes should be of one quality.

Each manipulator has a smooth board about 23 inches long and 11 inches broad. He takes from the bulk about 1 pound of the crude opium and rubs it on the board, puts it in the sun for about ten minutes, and afterward takes it into the shade and rubs it continuously on the same board with an iron implement having a wooden handle something like a small solid spade, and continues in the same manner until it dries up to a certain degree. It is then collected together in a mass sufficient for about a day's work, and then heated over a slow charcoal fire in trays until it becomes plastic; again each man takes about  $\frac{1}{4}$  pound weight and keeps kneading it on the board and manipulating it with the implement, as already described, until it dries up to the standard degree and assumes a somewhat golden color.

2. It is then collected and made up into cakes of 1 pound each. The cakes, after a couple of days, are wrapped up in pink paper and tied around with string, then put into tin boxes, packed in layers with poppy chaff, so that the cakes do not roll about, then again packed into wooden boxes; the boxes are covered with hide and gummy, and the opium is then ready for exportation.

If the drug is prepared in cold weather it has to be dried in the beginning by artificial warmth and by rubbing on the board, and keeping the boards, while in manipulation, near a charcoal fire.

The highest morphia of Persian opium is 12 per cent. and the touch 90 per cent. The tests are made by the best known methods, as used in London.

### Fertilizer for Plants.

Ammonium phosphate.....30 grams  
Sodium and potassium nitrates, each.....25 grams  
Ammonium sulphate.....20 grams

To be diluted not over 1 part to 1,000 of water.

### Cotton Seed Oil in Olive Oil.

For the detection of cotton seed oil in olive oil (to which it is equal for all practical purposes, but which those who wish to buy olive oil prefer to get without any admixture) the following table of colors—

COLOR TESTS FOR THE DETECTION OF COTTON SEED OIL IN OLIVE OIL.			
	Reagent.	Olive.	Cotton seed.
Nitric acid.....		Greenish.	None.
Fuming nitric.....		Brown.	Brown.
Sulph. 1.65 grav.....		Green.	Red.
Sulph. nit.....		Green.	Red.
Potash or soda lye.....		White.	Violet.
Zinc chloride.....		Red.	Brown.
Hydroch. acid and sugar.....		Yellow.	Orange.
Calcium disulphide.....		Permanent gold.	Permanent gold.
Tin chloride.....		At first yellow.	Orange yellow.
Syrup and phosph. acid.....		Result yellow or green.	Yellow brown.
		Cold, green.	Gold yellow.
		Hot, colorless.	Reddish yellow.
		Alone, yellow.	Pale yellow.
		With sul. acid, yellow.	Pale chocolate.
Iodine degree.....		81.3.....	107.9.
		103.9.....	
Per cent. caustic potash for saponification.....		18.98 to 19.26.....	19.10 to 19.66.

lanced in the afternoon, and the opium which exudes and dries during the night is collected into copper pots early the following morning.

The opium gathered is kept in store until it is required to be prepared in thick earthenware or copper pots.

tions, etc., caused by treatment with various reagents, will be found interesting and profitable.

The first column gives the reagent employed; the second, the effect produced upon olive oil; and the third, that produced upon cotton seed oil.

## Granular Effervescing Preparations.\*

BY GEO. LUNAN.

There are now four official granular effervescent preparations in the B. P., viz.: the citro-tartrate, phosphate, and sulphate of sodium and the sulphate of magnesium. Three of these are in the "Additions, 1890," and the growing popularity of these preparations assures further additions in the new B. P. It is not too much to say that caffeine and lithium preparations are most likely. We may have a demand for, 2 grains to dram, hydrobromate of caffeine one hour, and later 5 grains, or possibly a combination with bromide of sodium. Consequently, we must be prepared at short notice to dispense, if possible, variously medicated effervescent granules. The apparatus which I use in my business for the purpose is now before you, and I propose granulating a small quantity of effervescent citro-tartrate of sodium to demonstrate its workableness. It is not offered as the acme of apparatus, nor is it put before you as an original idea.

### THE GRANULAR MASS.

A necessary constituent is, of course, the citric acid, the water of crystallization being liberated when heat is applied, and, if the formula is properly adjusted, this binds the powders into a suitably coherent mass that can be granulated by pressing through a sieve of the desired size. As the medication varies, so must the relative amount of citric and tartaric acid to suit the medicament, thus a hydrated substance requires less of the former and more of the latter, and *vice versa* with an anhydrous ingredient. Yet the citric acid is not a *sine quâ non*, for the United States Pharmacopœia has a semi-granular preparation made by damping the ingredients with alcohol, and so making a coherent mass suitable for granulating, actually dried and powdered. This—their caffeine preparation—has no citric acid for granulating purpose, yet it proves that where you have a medicament soluble in alcohol you can granulate without citric acid.

### HEAT.

The heat applied to a granule at any time should not exceed 100 C, otherwise you discolor the granule and drive off much of the carbonic acid. At the same time, for purposes of economy, a strong heat obviates the use of the B. P. proportions of citric acid. Samples of cheap so-called citrate of magnesia contain a large percentage of sugar and tartaric acid, with a small percentage of citric. This was my experience when the prices of the two acids were not so nearly identical as to-day. It is always a mistake to sacrifice either to uniformity or size of granule the effervescing and other properties, which heat may destroy. That is, you may bake them to the detriment of the medicament and the briskness of the effervescing draft.

### NEUTRALITY.

The theoretical—usually slight—acidity of the B. P. types of granules generally agrees with the practical. With substances such as citric and tartaric acid and bicarbonate of sodium the variability is small, and a slight deficiency in the former is counterbalanced by the same in the latter. Theoretically, the effervescent citro-tartrate of sodium contains

about  $\frac{1}{2}$  per cent. excess acidity, while the sulphate and phosphate of sodium preparations  $\frac{1}{4}$  per cent., doubtless to give a pleasant sharpness to the draft, and in the latter instances to cover the mawkish saline taste. The effervescent magnesium sulphate contains 1-10 per cent. excess acid. In granule making, the question of neutrality is important. In some cases it is necessary to make an exactly neutral granule, if the therapeutic action is to be maintained. Take, for example, piperazine, which only acts in alkaline solution. It must be retained in its initiatory condition in the finished granule, not only by adjusting the basis of the formula, so as to give, if anything, an alkaline reaction when decomposed, but the order of mixing must be strictly maintained to prevent it becoming neutralized by the acids. In this instance the piperazine must be first thoroughly mixed with the bicarbonate, and any predecomposition in the granule will take place between the acids and the latter, for which they have greater affinity. Pharmaceutically, too, the order of mixing has a great deal to do with the product. We invariably granulate piperazine without heat, having our formula so adjusted as to yield a coherent mass when simply mixed in the proper order. In this and in other instances of a similar type, with a little adjustment it is quite easy to avoid detrimental decomposition by heat.

### TYPES OF GRANULES.

The effervescent citro-tartrate of sodium affords a basis—not invariable, as I have shown, however—suitable for medication where the quantity of medicament is small; such as citrate of caffeine, 2 grains to dram; antipyrin, 5 grains; iron carbonate, 5 grains; iron and arsenic, iron and quinine, and so on. Another type is the sulphate, and phosphate, of sodium, and the sulphate of magnesium granules, where the medicament forms 50 per cent., although ultimately, when dried, actually about 25 per cent. of the two former, and 40 per cent. of the latter. These are naturally much less effervescent than the former type, although the sugar is entirely left out of sodium salt preparations for this and physiological reasons. In the magnesium preparation, the granule is overburdened with medicament and sugar, leaving only 50 per cent. of available effervescing material. I have something to remark regarding the size of granules of this type. There is, unfortunately, a demand for granules medicated with insoluble substance, such as phenacetin, sulfonal, salicin, quinine salicylate, euonymin and bismuth salts. Of course, these are neither elegant nor palatable, and in all cases should be pointed out to prescribers as unsuitable modes of exhibition, excepting, perhaps, the bismuth salts, where the carbonic acid would increase the effect. Even if permissible in that case, you have still to reckon on loss of medicament adhering to glass or settling to bottom. Non volatile evaporable liquids can be mixed with the sugar, or, if not present, the bicarbonate of sodium, and dried before being incorporated with the acids. I have in view such substances as lysidine. Powerful poison such as strychnine and arsenic can only be evenly diffused by adding to sugar, or, if not, the bicarbonate, in solution, and drying at a low temperature before mixing with acids. Two of the pharmacopœial granules—the sodium prepara-

tions—are without sugar, for reasons already noted, and in many others, not official, in frequent demand, its presence is contraindicated. True, a granule without sugar will always be less uniform, unless sifted and made with a fine sieve, because the binding power of the sugar is absent; but against that I place the greater briskness which is always noticeable; the whole granule consisting of effervescent material. Saccharin has been used as a substitute. There are cases where the use of sugar is prohibited, and from my own experience I should say that far too much is used in granule making. In ordinary medicated granules it is not required either for palatability or to aid the granulating. It is impossible, however, to suggest a standard formula, as almost every substance requires a variation in the quantities of acids and bicarbonate to give the best result. The sugar in the official magnesium granule keeps it from readily disintegrating in water. It is often more economical, and gives a more effervescent draft to prepare the medicament with the decomposition of the granule, or, if the carbonate from which the salt is produced is only slowly decomposed, the reaction can be got over on the slab, the product dried before incorporating with the granule mass. I have in view in the latter case such examples as the production of true citro-tartrate of magnesium, and, in the former, to citro-tartrate of potassium and lithium.

### THE SIZE OF GRANULES.

I use two sieves, a No. 12 and a No. 6, and find that, as far as I can understand, the former is most suitable for granules with a large percentage of medicament or sugar, either or both, consequent small proportion of effervescent material, and solubility. The small granule is more quickly decomposed in water, but it is also prone to caking and loss of carbonic acid in bottles unless dried until it is pulverulent. I do not think a No. 12 sieve suitable for many kinds, but no doubt it is the most suitable size for the types I have mentioned. It is, I think, a mistake to sacrifice to uniformity or size of granule either the effervescence or color of granule. Consequently, for all practical purposes, so that they may keep under varied weather and other conditions, a No. 6 or No. 9 sieve is the most suitable. These give an appreciable sized granule, which will keep for a longer period without change and protect oxidizable substances, such as carbonate of iron, retain the solubility of scale iron preparations, and mix and decompose evenly in water without stirring.

These are considerations which weigh with makers of granules, but they are not so important but that, if desired by prescriber, the size can be made as he may wish without seriously interfering with the effect or keeping properties.

### DESCRIPTION OF THE APPARATUS.

I have recommended principles which, I believe, are sound. It has not seemed to me necessary to give the minutiae of working details. That will come with little difficulty where there is a desire to make granules in an intelligent manner. The apparatus is simple, the means to your hands, the construction of formulæ contained in very simple equations, and to those who have not yet, in their shops, undertaken this manufacture, I commend it as essentially a thing which can be done in the dispensing department, and not left in the hands of wholesale or special makers.

\* Read before the Edinburgh Chemists' Assistants' and Apprentices' Association.

### A Metric Point.

Since using the metric system in prescribing, we have "stumbled," as it were, upon the following handy method of "dosing" a drug. It is as follows: When making use of a 2-ounce mixture, remember that the number of grams ordered of any medicament should be exactly the dose in minims or grains of the medicine. In other words, write (for a 2-ounce mixture) the same number of grams of a remedy that you wish grains or minims administered. This is a very remarkable coincidence, and reduces metric prescription writing to a play spell, as no arithmetical calculation is needed to properly apportion the quantity of a drug after once knowing its dose in grains and minims.

As an example: Say you wish to give 1 minim of belladonna fluid extract; 2 minims of nuxvomica, fluid extract, and 8 grains of bromide of potash at a dose. It would be written thus:

	Grams.
Fluid Extract Belladonnae.....	1
Fluid Extract Nucle Vomicae.....	2
Potassii Bromidi.....	8
Aqua Menth. pip., q. s. ad.....	64

You thus virtually substitute grams for minims and grains, and that is the end of the matter.

If you wish to order a 4-ounce mixture, you simply write double the quantity of grams, that the dose of the remedy is in grains or minims.—*Leonard's Dose Book.*

### Vegetable Diet in Relation to the Length of the Human Intestine.

The intestine of animal vegetable feeders is known to be of great length, but, so far, no detailed investigations have been made in this regard respecting those human races which mainly live on vegetable products. However, it is interesting to note that a professor of anatomy in the Academy of Medicine in Tokio has made some attempt in this direction by inquiring into the length of the intestine in Japanese persons. The inquiries, according to the *Medical Press*, included the measurement of the body and of the intestine in 25 cadavers, the ages of which varied from 17 to 60. The result of the measurement went to show that the length of the intestine in the Japanese was half as long again as the average length in a European. Thus, the suggestion has been made that the rice diet so universally resorted to by the Japanese would have more chance of thorough digestion in them than in Europeans, whose intestine is shorter. We merely state these facts for what they are worth. Whether or not they are true is another matter.

### Incompatibility of New Remedies.

Morck points out that *trichloride of iodine* is decomposed by alcohol and partially by water; the aqueous solution liberates iodine from iodides; ammonia added to it forms the explosive iodide of nitrogen; reducing agents liberate the iodine; and many organic bodies, among others the fatty oils and alcohol, decompose it.

*Hydroxylamine Hydrochlorate* is very unstable, and readily forms explosive mixtures; it is a powerful reducing agent; alkalis liberate the base, which is unstable and explosive.



We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of any unusual compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the labels used on packages of the compound should also be sent.

**Removal of Yellow Coating from Teeth.**—T. C.—Dentists effect this with the use of hydrogen dioxide solution, though a weak acid is occasionally employed, hydrochloric being preferred.

**Silver Cream Paste.**—C. L. M.—A paste similar to the sample submitted can be made by mixing whitening with a strong watery solution of soft soap. The exact proportions required will have to be determined by experiment.

**Solution of Lemon Oil in Cologne Spirit.**—E. H. A.—One ounce of oil of lemon should dissolve easily in a pint of cologne spirit, providing the latter is of proper strength. The fault probably lies with the quality of the alcohol you are using.

**Mosquito Spirit.**—"P. D."—The following is a new formula not heretofore published:

Oil patchouli.....	gtt. iiij
Oil cinnamon.....	gtt. iiij
Oil sandal wood.....	3iv
Alcohol.....	℥j

This is applied to the skin as a lotion.

**Mosquito Oil** has the following composition:

Oil of tar.....	℥j
Olive oil.....	℥j
Oil of pennyroyal.....	3iv
Spirit of camphor.....	3iv
Glycerin.....	3iv
Carbolic acid.....	3iv
Mix.—"Shake" label.	

**Mosquito Tincture** is considered a good preventive application. The formula is as follows:

	Parts.
Eucalyptol.....	10
Acetic ether.....	5
Eau de Cologne.....	40
Tincture of insect powder (1 to 5 of alcohol).....	50

Apply in the usual manner.

**Removal of Cigarette Stains from Fingers.**—E. H. A. asks for a method of removing cigarette stains from the fingers. He says he has tried solutions of chlorinated soda and hydrogen dioxide, but without success.

Bathe the stained parts in saturated solution of potassium permanganate, and remove this by washing with pure hydrochloric acid followed by plain water. The operation must be conducted quickly.

**To Overcome Sweaty Hands.**—L. M.—You might consult a physician to advantage. We have seen the addition of a minute quantity of sulphuric acid to the water in which the hands are to

be bathed recommended. An approved combination for this purpose may be made as follows:

Tincture myrrh.....	3j
Sulphuric acid.....	gtt. iv
Water.....	3iv

This may be applied direct or may be added to the water used for washing the hands.

**Solidified Glycerin.**—W. P.—A solidified glycerin for toilet use may be made as follows:

Transparent soap.....	1½ ounces
Water.....	6 ounces
Glycerin.....	38 ounces

Dissolve the soap in the water by heat, add an equal weight of glycerin. When dissolved, add the rest of the glycerin and water sufficient to make up the weight. Perfume to suit.

**Kava-kava.**—R. and G.—This is a species of Piper, *P. Methysticum*. According to the "National Dispensary," it is said to have long been used by the inhabitants of the South Sea Islands as an intoxicant and as a remedy for gonorrhoea. It has been credited with sialogogic properties and has been used as a tonic to the digestive organs, a stimulant of the nervous system, a diuretic and a sedative of genital excitement. You will find a formula for the preparation of a fluid extract of Kava in the National Formulary.

**Fluid Butter Color.**—A. H.—This consists chiefly of annatto in solution, and a typical formula for its preparation is as follows:

Roll annatto.....	3j
Potass. carbonate.....	3j

Cut the annatto into small pieces and pour upon it the potassium carbonate dissolved in 5 ounces of boiling water.

Let stand for two or three hours, stirring occasionally, then add 1.0 ounces of water and boil until the liquid is reduced to 10 ounces; add boric acid 3j and set aside for a day or two. Decant the clear liquid and strain the rest through cotton.

**A Problem in Simple Arithmetic.**—E. E. B. writes: Will you please inform me the best practical way to cut down crude carbolic acid so as to reduce the price. The acid costs us 75 cents per gallon, and we wish to make a solution to retail at 25 or 20 cents.

This is best worked out by simple rule of three. State the question thus: How much of a gallon of crude carbolic acid, costing 75 cents, must I take to make a

gallon of solution costing 25 cents; then 75 : 25 :: 8 pints = 2 pints 10½ ounces, the quantity required. The quantity necessary for a solution to cost 20 cents is calculated in the same way, thus 75 : 20 :: 8 = 2 pints 2 ounces. It is understood, of course, that the diluent is water.

**Cloth Cleansing Fluids.**—H. E. S.—These are esteemed good cloth cleansing compounds:

## I.

Glycerin.....	1
Ether.....	1
Alcohol.....	1
Ammonia water.....	1
Castile soap.....	1
Water, enough to make.....	Oil

Apply with brisk rubbing and wash off with warm water.

## II.

Castile soap.....	1
Washing soda.....	1
Borax.....	1
Ammonia water.....	1
Alcohol.....	1
Ether.....	1
Soft water, enough to make.....	Cong.
Mix.	

**Gillet Root?**—S. D. W. writes: Can you give some information as to what is intended by the words *Gillet Root* in the appended formula for "Hair Tonic." The party presenting the recipe claimed to have gotten it filled in several stores in Philadelphia and New York. The formula reads:

	Ounces.
Gillet root.....	4
Alcohol.....	2
Castor oil.....	1

Gillet root is new to us. We have been unable to find any reference to it in the works of reference at our disposal. Possibly some reader of the *DRUGGIST* may be able to furnish the desired information.

**Synthetic Oil of Wintergreen.**—A. M. asks for a working process for the manufacture of synthetic oil of wintergreen.

Thayer gives the following practical method of applying the hydrochloric acid process for the manufacture of synthetic wintergreen oil: Take 505.47 gm. of salicylic acid and 690.85 gm. of methyl alcohol (sp. gr. 0.820); place the alcohol in a wide-mouthed flask and add portions of the acid until a saturated solution is obtained.

Make the additions slowly, as all of it will not dissolve. Connect the flask with an upright condenser and heat it on a water bath until the contents are brought to the boiling point, then pass dry hydrochloric acid gas into the hot solution until the latter is saturated. Then add about 10 gm. more of the salicylic acid, again saturate the solution with hydrochloric acid and repeat the operation until all the salicylic acid has been added, the passage of the hydrochloric acid gas being continued for two hours after the last addition of the acid. It is necessary that the gas be thoroughly dried, by being passed first over anhydrous calcium chloride, then through three bottles of sulphuric acid, before being conducted into the salicylic acid solution.

The lower oily layer, which separates, is washed with water until no longer acid to litmus, then distilled from a flask by the aid of live steam. The distillate is freed from excess of water by the use of a separating funnel, and finally dried thoroughly over anhydrous calcium chloride. The product thus obtained is of a slightly yellowish color, has an agreeable odor, and costs 90 cents to \$1 per pound, the above quantities yielding 500 gm. of methyl salicylate. Ethyl

salicylate can be prepared in the same way.

**Water Proof Cloth.**—D. G. S.—The sample of cloth you send has probably been water proofed by some process similar to those outlined in the appended formulas. It is almost impossible to state definitely the formula which would answer your purpose best; this you will have to determine for yourself by experiment.

## LOWRY'S PROCESS.

Two ounces soap, 4 ounces glue, 1 gallon water. Soften the glue in cold water and dissolve it together with the soap in the water by aid of heat and agitation. The cloth is filled with this solution by boiling it in the liquid for several hours, the time required depending upon the kind of fiber and thickness of the cloth. When properly saturated, the excess of liquid is wrung out, the cloth is exposed to the air until nearly dry, then digested for 5 to 12 hours in the following solution:

Alum.....	18 ounces
Salt.....	15 ounces
Water.....	1 gallon

It is finally wrung out, rinsed in clean water and dried at a temperature of about 80 degrees F. (27 degrees C.)

## PAUT'S PROCESS.

Paut's process requires a small quantity of oil, but in other respects resembles the last. It is given as follows:

Sodium carbonate.....	1 pound
Caustic lime.....	8 ounces
Water.....	40 ounces

Boil together, let it stand to settle, then draw off the clear lye and add to it 1 pound tallow, ½ pound rosin, previously melted together. Boil and stir occasionally for half an hour, then introduce 8 ounces glue (previously softened), 8 ounces linseed oil and continue the boiling and stirring for another half hour. In water proofing, ½ ounce of this soap is mixed with 1 gallon hot water, and in this the goods are soaked for about 24 hours, according to thickness and character. The pieces are allowed to drain until partly dried, then soaked for six hours or more in a solution prepared as follows:

Aluminum sulphate.....	1 pound
Lead acetate.....	8 ounces
Water.....	8 gallons

Shake together, allow to settle, and draw off the clear liquid. Wring out after rinsing and dry at a temperature of 80 degrees F. (27 degrees C.)

## Student's Column.

## Organic Materia Medica of the U. S. P.

(Concluded.)

## Tabacum. Tobacco.

BOTANICAL NAME.....	Nicotiana Tabacum.
NATURAL ORDER.....	Solanaceae.
HABITAT.....	Tropical America.
CONSTITUENTS.....	Nicotine, nicotainin, resin, albumin, gum, extractive.

PROPERTIES.....Diuretic, sedative, emetic.

PARTS USED.....The commercial, dried leaves.

Dose—Gm. 0.3–0.13.

## Tamarindus. Tamarind.

BOTANICAL NAME.....	Tamarindus indica.
NATURAL ORDER.....	Leguminosae.
HABITAT.....	Tropical Africa, East and West India.
CONSTITUENTS.....	Tartaric, citric, a little malic and acetic acids, mostly as potassium compounds, sugar, pectin.

PROPERTIES.....Laxative, refrigerant.  
PARTS USED.....The preserved pulp of the fruit.

Dose—Gm. 2–20.

## Tanacetum. Tansy.

BOTANICAL NAME.....	Tanacetum vulgare.
NATURAL ORDER.....	Compositae.
HABITAT.....	Asia and Europe; naturalized in North America.

CONSTITUENTS.....Vol. oil, tanacetin, fat, resin, tannin.

PROPERTIES.....Tonic, anthelmintic, emmenagogue.

PARTS USED.....The leaves and tops.

Dose—Gm. 1–4.

## Taraxacum. Taraxacum; dandelion.

BOTANICAL NAME.....	Taraxacum officinale.
NATURAL ORDER.....	Compositae.
HABITAT.....	Europe; naturalized in North America.

CONSTITUENTS.....Inulin, pectin, bitter principle taraxacin, resin, and wax like body taraxacin.

PROPERTIES.....Alterative, cholagogue, deobstruent.

PARTS USED.....The root gathered in autumn.

Dose—Gm. 2–8; Ext., Gm. 0.60–1.20; Ext. fld., Cc. 4–8.

## Terebinthina. Turpentine.

BOTANICAL NAME.....	Pinus palustris.
NATURAL ORDER.....	Coniferae.
HABITAT.....	United States.

CONSTITUENTS.....Volatile oil, bitter principle, formic and succinic acids in small quantities.

PROPERTIES.....Diuretic, sudorific, astringent, stimulant, haemostatic.

PARTS USED.....The concrete oleoresin.

Dose—Gm. 1–4.

## Terebinthina Canadensis. Canada turpentine; Canada balsam; balsam of fir.

BOTANICAL NAME.....	Abies balsamea.
NATURAL ORDER.....	Coniferae.
HABITAT.....	Canada and Northern United States.

CONSTITUENTS.....Volatile oil, uncrystallizable resin, bitter principle.

PROPERTIES.....Similar to other turpentine, mostly used externally.

PARTS USED.....The liquid oleoresin.

## Tragacantha. Tragacanth

BOTANICAL NAME.....	Astragalus gummifer and other species of astragalus.
NATURAL ORDER.....	Leguminosae.
HABITAT.....	Western Asia.

CONSTITUENTS.....Tragacanthin or bassorin, and the calcium compound of a gummy acid, starch, moisture, etc.

PROPERTIES.....Demulcent.

PARTS USED.....The gummy exudation.

## Triticum. Triticum; couch grass.

BOTANICAL NAME.....	Agropyrum repens.
NATURAL ORDER.....	Gramineae.
HABITAT.....	Europe and North America.

CONSTITUENTS.....Triticin, glucose, fruit sugar, inosit, mucilage, etc.

PROPERTIES.....Alterative, diuretic, aperient.

PARTS USED.....The rhizome

Dose—Gm. 2–8; Ext. fld., Co. 2–8.

## Ulmus. Elm; slippery elm.

BOTANICAL NAME.....	Ulmus fulva.
NATURAL ORDER.....	Urticaceae.
HABITAT.....	North America, west to Louisiana and Nebraska.

CONSTITUENTS.....Mucilage.

PROPERTIES.....Demulcent.

PARTS USED.....The inner bark.

Dose—Gm. 5; Mucilage, ad lib.

## Uva Ursi. Uva ursi; bearberry.

BOTANICAL NAME.....	Arctostaphylos Uva-ursi.
NATURAL ORDER.....	Ericaceae.
HABITAT.....	United States, Europe, England.

CONSTITUENTS.....Tannin, gallic acid, arbutin.

PROPERTIES.....Astringent, tonic, diuretic, nephritic.

PARTS USED.....The leaves.

Dose—Gm. 1–4; Ext., Gm. 0.6; Ext. fld., Co. 4.



### The Separation of Kolanine from Kola.

Jules Jean, the author of the very interesting article on "The Pharmaceutical Preparations of the Kola Nut," which we reprinted from the *Paris Répertoire de Pharmacie* in our issue of March 10, has communicated a further note on the subject to our contemporary. He describes his method of separating the active principle, kolanine, which he inadvertently omitted in his first paper.

After having exhausted the kola of its caffeine and theobromine by treatment with alcohol, the powder is transferred to a Soxhlet apparatus and extracted with 90 per cent alcohol. The alcohol extracts the whole of the kolanine and the tannin and coloring matter. To separate the two latter substances the alcoholic extract is evaporated on a water bath, and the residue treated with boiling distilled water, which dissolves the tannin and coloring matter. On filtering the solution, the kolanine is left behind on the filter paper. It is then washed with cold water and recovered in the usual manner.

### Alkaloid Stearates.

The frequent demand of physicians for combinations of alkaloids with various fats and oils, in which the former are insoluble, has led Zanardi (*Bollet. chim. farmaceut.*) to devise a process for the preparation of stearates of atropin, morphin and cocain, these being readily soluble in fats and vaseline.

Morphin stearate— $C_{17}H_{35}NO_2$ ,  $C_{17}H_{33}COOH$ —may be prepared by taking molecular quantities of stearic acid (5.68 p.) and morphin (5.72 p.), the former being dissolved in 100 ccm. of absolute alcohol by warming; to this solution the morphin is added in small portions, when, on cooling, the morphin stearate crystallizes out. On concentrating the mother liquor a further portion of the salt may be obtained, which should be dried between 80 and 40 degrees C.

Another method of preparation may be employed by interaction between sodium stearate and a salt of the alkaloid. The sodium stearate being prepared by adding to a warmed mixture of 5.68 gm. of stearic acid (finely shaved) and 50 gm. of distilled water, 20 ccm. (0.8 gm. NaOH) of  $\frac{N}{1}$  solution of soda. To this solution

is added a solution of 7.51 gm. of morphin hydrochloride in 100 gm. of water. The amorphous white precipitate of morphin stearate is collected on a filter and washed with water till the filtrate ceases to become turbid upon the addition of either hydrochloric acid (sodium stearate) or silver nitrate (previously acidifying with nitric acid). Morphin stearate forms white glossy crystalline scales, melting at 84 to 86 degrees C., insoluble in water and cold alcohol, slightly soluble in ether, benzine and turpentine, at ordinary temperature soluble in fats and oils to the extent of 1 per cent. This salt contains 50.17 per cent. of morphin.

Atropin stearate may be prepared in like manner to the above. It forms white crystalline needles, melting at 120 degrees C., soluble to the extent of the morphin stearate. Atropin stearate contains 50.43 per cent. of atropin.

Cocain stearate is likewise prepared in a similar manner to the above, employing 2.84 gm. of stearic acid to 3.08 gm. of cocain. The crystalline salt melts at 90 degrees C., and contains 51.68 per cent. of cocain.



## Advertising Aid, how, when, and where to Advertise.

PRACTICAL HINTS AND SUGGESTIONS. CRITICISM AND CONSTRUCTION OF ADVERTISEMENTS.

In Charge of Ulysses G. Manning.

The department editor will be pleased to criticize any advertisements submitted and to suggest improvements. Questions answered and advice given. Our readers are cordially invited to avail themselves of this help.

### BE REASONABLE.

A CORRESPONDENT, somewhat skeptical as to the merits of advertising, writes that he has paid his local paper \$50 a year for four years, has changed his ads. every month at least, and up to date is not convinced that the advertising has paid. He remarks that his trade has constantly grown, but that it would have grown any way, as he has the best location in town.

There is probably no way of determining whether this man's outlay has brought returns. I believe, however, that it has. I don't know what sort of ads. he employed. I do know that in changing only once a month he has been unfair to his advertising. Yet, in spite of this, I believe his expenditure has paid.

I wonder what he expects \$50 a year to do. In the four years this man has been in business he has spent \$200 for advertising. He began with no trade, and informs me that he now has a business of \$9,000 a year. If the \$200 expended for advertising has, in the four years, pulled trade to the extent of \$800 his advertising has paid. The \$800 distributed over four years means increased sales to the extent of about 60 cents a day. The probabilities are that the advertising has pulled two or three times this amount of business, but even then the returns would hardly be perceptible.

Assuming that the latter figures are correct, this man has never made an investment that paid better. It is this thing of expecting magical things of advertising that brings disappointment—the idea that you can plant copper and harvest gold. With a business of \$9,000 a year, this man can put \$250 into advertising without serious risk. If his store is all right, if he is fair, just and courteous to his customers, if he knows the rudiments of advertising and is wise in his expenditures, he can do this. If he does do it, and resolves for the next four years to devote about 3 per cent. of his gross sales to advertising, he will emerge

from the campaign freed from his skepticism.

### Criticism and Comment.

S. Olin Washburne, Sing Sing, N. Y., submits the ad. here reproduced, minus the cut of a graduate which illustrated the original. This ad. is a good example of the old style of setting and the one that is still very much in vogue. I reproduce it in order to contrast it with a simpler and, I believe, more effective setting.

DON'T USE TOO MANY KINDS OF TYPE.

A good many printers seem to think that proper display in an ad. requires the display of about every style and size of type available, with a few ornaments run in to show the resources of the office. An ad. so set is neither artistic nor attractive. The essential thing is that an ad. shall be easily read; and it will be most readable when not more than two styles of type are employed, and as few sizes as possible.

Advertisers leave this matter of setting too much to the printer. If you are unable to explain what you want, clip some ad. that suits you and have it used as a model. Mr. Washburne probably bought his ad. already electrotyped. Judging from the rather slender peg on which the argument is hung, and from the general appearance of the ad. and cut, I should pronounce this a stock ad. I am afraid it sounds too much like one to be very effective. It is better than the average druggist's ad., however.

Mr. Washburne should have a border put around his space.

### ADVERTISING CUT RATES.

ATLANTA, GA.

MR. ULYSSES G. MANNING.

DEAR SIR: Inclosed we beg to hand you specimen of the advertising we have been doing for the past several weeks in our Friday afternoon paper and Saturday morning's paper, and would ask you to kindly look over same, and oblige,

Yours truly,  
JACOBS' PHARMACY COMPANY.

The Jacobs' Company have taken to splurging, using half, three quarter and whole pages two days in the week. These last ads. sent in are the best so far submitted—best in appearance, construction and, I doubt not, are the most effective.

They resemble the department store ads. of the larger cities. Their space is surrounded by a heavy border. There is an introduction in large type, while the body of the ad. is divided into col-

umns filled with cut prices and descriptive matter under various sub headings. Most of the ads. are relieved by three or four cuts. The method now pursued of focusing attention on a special Saturday sale is a good one and a department store scheme. In these ads. two prices are quoted. First, the usual cut one, and second, the special Saturday cut price. At the second price goods must be purchased on Saturday, and the amount of the purchase is limited to one or two packages in case of patents.

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#### WHERE THE PROFIT COMES IN.

Such prices as Carter's Pills, 10 cents; Castoria, 20 cents; Pink Pills, 80 cents; Green's Nervura, 65 cents, would look as though there were rocks ahead. But you will find that Jacobs, in common with most of the shrewd cutters, advertises largely goods of his own make, bottling or boxing. On these goods a fair margin of profit is of course made. Atlanta is the champion cut rate city. Jacobs has at least two competitors who

lines of unequal length that rarely extend over half way across his space.

His headlines are good, and the peculiar display doubtless attracts attention. Brief ads. of this sort should be changed often to be effective. It will be wise to occasionally drop this regular style and enter a little more fully into details. Some of the ads. would be strengthened by additional argument.

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#### SUCCESS THE TEST OF MERIT.

MR. MANNING.

DEAR SIR: I inclose for criticism in your department in the AMERICAN DRUGGIST four circulars, all of which I distribute in large quantities. Of the two corn cure circulars which is the better, typographically? I have received good returns from them all. I also inclose two newspaper ads. on which I would like your opinion. Yours resp.

H. R. HALE.

When an advertiser reports that he has received good returns from his printed matter, criticism is vain. A circular may be written in Addisonian English or in the language of Chimmie Fadden, if it brings good results it is a good circular, and any radical change would be folly.

I can easily believe that these circulars have brought business, because they are much better than the average. Good ink has been used on good paper, and the display is well balanced. The setting of the two corn cure circulars is so much the same that it is practically useless to call one better than the other. The display in the smaller one is a trifle more harmonious.

I don't like the heavy border around the hair renewer circular. Looks too much like a funeral invitation. Where heavy display lines are used throughout a circular a light face border will look best.

Both of the newspaper ads. would be improved by some information as to the nature of the preparation, how and why it does good. Price should always be given. Ads. for such a preparation should be so complete that the person who sees a single one of them may be able to get a definite idea of what he is asked to buy.

Considerable matter is at hand for criticism that will receive attention in the next issue.

#### A Display of Poisons.

A correspondent of *Printers' Ink* alludes to a window display in one of the drug stores in St. Louis, Mich., which has attracted a great deal of attention. It consists of various poisons arranged in different rows across the window, the eye being attracted by the placard: "Everything in this window is poison." Classed under this head in one corner are a dice box, a dime novel and a pack of playing cards. A bottle of whisky, entwined by the skeleton of a snake, occupies a conspicuous place. In the center of all is perched a human skull smoking a cigarette.

#### Where Party Agrees Not to Resume the Drug Business.

The Supreme Judicial Court of Massachusetts (Smith vs. Brown, 42 N. E. Reporter, 101) holds that a contract by a seller of an apothecary shop not to engage in the drug business within a certain distance of such shop is not invalid, because it is not limited as to time, and substantial damages may be found for a violation of such agreement, without specific evidence of what the

damage would be; but such party will not be enjoined where he has already spent considerable money in fitting up a new store with the knowledge of the complainant that it was being done.

#### Liability of Lessee of Soda Fountain for Its Being Damaged.

In an action for injury to a soda fountain while in the possession of the lessee, under an agreement for its safe return after the season, the measure of damages was the difference between the value of the property in the condition in which it was returned and the value it would have had at the time of the return, if it had been returned in good condition, added to the stipulated rental, with interest from the date of the return.

The lessee would be liable for damages occurring by reason of its having been improperly packed for transportation, in the absence of an agreement that such provisions should have been made by the lessor. *Phillips vs. Hughes* (Ct. Civ. App. Tex.) 83 S. W. Rep. 157.

**Scientifically Exact.**  
OUR  
**Weights AND Measures**  
Have been examined  
and declared

#### SCIENTIFICALLY EXACT.

This is a matter of importance in Dispensing Medicines. A little too much of this or not quite enough of that ingredient would modify your Doctor's Prescription considerably. Perhaps make it injurious or of no effect. No need to fear such faulty features in our methods.

Have You Used the Latest Perfume,  
MAUD MULLER?

**S. OLIN WASHBURNE,**

DRUGGIST AND STATIONER,

Cor. Main and Spring Streets.

AS PUBLISHED BY MR. WASHBURNE.

advertise largely. The situation there is chiefly interesting as a demonstration of what skillful advertising will do. There are plenty of people who contend that the drug business is not susceptible of profitable advertising. They have tried it and therefore know. Yet, here are stores in a medium sized city offering prices that would mean the ruin of three-fourths of the druggists, and still spending hundreds of dollars a week in advertising. These people have been at it a good while. It is safe to assume that however clever their business methods, they would hardly have been able to elude the sheriff but for the aid of printers' ink.

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#### GOOD ADS. FROM PENNSYLVANIA.

Jno. V. Stephenson, Greensburg, Pa., sends several of his ads. He uses a 8 inch single column space. His ads. are brief and "snappy." He employs, usually, about 25 or 30 words set rather oddly, in

## SCIENTIFICALLY EXACT.

Our weights  
and measures

have been examined and declared scientifically exact. This is a matter of importance in dispensing medicines. A little too much of this or not quite enough of that ingredient would modify your doctor's prescription considerably. Perhaps make it injurious or of no effect. No need to fear such faulty features in our methods.

Have you used the latest perfume,  
Maud Muller?

**S. OLIN WASHBURNE,**  
DRUGGIST AND STATIONER,  
Cor. Main and Spring Streets.

AS REVISED BY THE DEPARTMENT EDITOR.

#### Some Unfamiliar Drugs.



CRAMP BARK.  
(*Viburnum Opulus*.)



## NEWS OF THE FORTNIGHT.

### The Ohio Bribery Investigation.

The Ohio Legislative Committee which is investigating the charges of accepting bribes which have been brought against subordinate officials of the Ohio Food and Dairy Commission, has been sitting at Cincinnati, producing interesting though not quite such sensational disclosures as were made in the earlier sessions of the committee.

### Druggists as Liquor Sellers.

The effects of high license in Pennsylvania (p. 226) will probably enable one to predict what will follow the introduction of the same system (as embodied in the Raines bill) in New York. Massachusetts druggists are not quite satisfied with their own law, although it would seem that they have things pretty much their own way—but they can't agree about the way. Ohio has a brand new liquor law, which does not meet with the unqualified approval of the druggists throughout that troubled State.

### Pure Food Law in Pennsylvania.

The Philadelphia manufacturers promise to fight the cases brought by the Pennsylvania food commissioner, and so far the matter has not gotten into court.

### Board Prosecutions.

No new developments have occurred in the prosecutions by the Kings County (Brooklyn) Board, the hearings having been delayed and postponed from time to time. The New York State Board of Pharmacy has mulcted three grocers for violations of the law.

### Obituary.

Robert England, a typical apothecary of the old school, has died, at his home in Philadelphia, full of years and of honor.

J. Brown Baxley, one of the most highly esteemed of the druggists of Baltimore, is dead, in his eighty-second year.

### The Ohio Food Commission Investigation.

CINCINNATI, Ohio, April 6, 1896.—The investigation of the bribery charges against the Ohio Dairy and Food Commission is still going on and speculation is ripe as to the outcome. The latest rumor is that parties outside the pale of office will be drawn into the investigation in some way. The local session of the Legislature Committee was begun in this city at 10 o'clock last Wednesday morning. Member Montgomery of the House of Representatives acted as chairman in the absence of Senator J. J. Sullivan, who was too ill to be present. The other members of the committee present were Messrs Ward, Dana, Stewart and Hysell. Attorneys Keating and Case represented the Dairy and Food Commission and Messrs. Powell, Ryan and Shay were there for Mr. White, president of the Predigested Food Company of New York.

The opening session was not specially interesting, though there were several of the persons most particularly interested in the results of the investigations present. The first witness called was the Western manager of Cook & Bernheimer Company, who testified to the trouble that they had been put to by the Food Commissioner, but brought out nothing of general interest. The next witness was Assistant Commissioner Luebbing, who testified to the fact that in company with Mr. Sterett he had called on A. J. White at the Grand Hotel, as had been previously testified by Mr. White. He was also present at the time when Mr. White called on Judge Dye, at which time Mr. White remained about 15 minutes. Luebbing had testified that he had never written a letter to Mr. White, but on being confronted with one that was written by him on June 25 he confessed that he had written the letter, but that he had forgotten about it. This letter had nothing in it necessarily reflecting upon the author. Efforts were made by the prosecution to make Luebbing confess irregularities in the matter of receiving the funds for fees and fines from people who had been prosecuted by the Commissioner.

### SERIOUS CHARGES AGAINST ASSISTANT COMMISSIONER LUEBBING.

Nothing of special interest occurred during the course of examination of several other witnesses until B. H. Kroger, a wholesale grocer of this city, took the stand as a voluntary witness. Mr. Kroger testified as follows:

In July, 1894, Luebbing telephoned me to come to his office, where I met him and another man, who might have been Judge Dye's brother. Luebbing told me that he had some samples of cloves from one of my stores which were adul-

terated. I asked him to allow me to get a warrant for the man who had sold them to me. This he refused to do, and I went away. I returned in a day or two and asked him to postpone the case until I came back from Cape May, where my boy was ill. He consented to this and nothing was done. I came back in about ten days. Luebbing was in the office alone with a boy. When I came in he sent the boy out for cigars. When he was gone Luebbing said: "You might as well pay the money to me; I wouldn't do this for everybody." I reached down in my vest pocket and handed him \$50 in fives and tens. Later Luebbing wanted some groceries for his mother-in-law and came to my store for them. He took about \$8 worth and I marked the check O. K. Shortly afterward he got another bill amounting to \$5 of which I did not know anything. My bookkeeper charged it and afterward dunned him for the amount, also without my knowledge. Finally Luebbing sent a check and after that I was arrested four times in succession.

The witness underwent a rigid cross-examination, but maintained his stand.

"Did you see Luebbing again?"

"Yes. I walked with him to the Squire's office, and then I told him that he was a blackmailer and a scoundrel, and ought to be in the penitentiary, and that I would write to the Governor about the matter."

### A HOSTILE DEMONSTRATION.

Here, carried away by his feelings, Kroger walked toward Luebbing, and shaking his finger menacingly at him, repeated the words. Luebbing said nothing, but his face flushed under the scathing arraignment.

Alfred Voegler succeeded Kroger on the stand, but his testimony was of little value to the prosecution. He stated that as president of the Druggists' Association he knew of three cases—those of John Bauer, W. L. Rheum and Bingel, druggists—that had been dismissed in Squire Winkler's court, without a finding of any kind. He was followed by Squire Winkler, who had brought his office docket with him.

By his own docket Squire Winkler showed that the following drug cases were still on the docket undisposed of: State of Ohio against Zwick, Lippert, Newberg, Kylius, Pardy, Darragh, E. Keeshan, Frank L. Grothe, Debold, Allen, Oechs, Woche, Kipp, Hardy, John Keeshan, Dodsworth, Kampfmuel-ler, Dorr, Ross, Wick and Bube. Squire Winkler claimed that in all these cases no conviction could be secured. Referring to the cases mentioned by Mr. Voegler, Squire Winkler's docket shows that they had all pleaded guilty, or that their attorneys had entered the plea. Continuing the examination General Powell asked:

"Wasn't it a frequent occurrence that Luebbing would arrange a settlement in those cases?"

"Sometimes people would come in and I would send them to Luebbing."

"Sometimes at Luebbing's suggestion dairymen would be dismissed on payment of costs and analysis fees?"

Nothing further of special interest went on during this session of the committee.

The investigation was resumed at 7.30 p. m. on March 8, and a number of witnesses were examined, all of whom testified to the high standing of Judge Dye in the community.

### AN OFFICIAL PATENT MEDICINE CO.

Assistant Commissioner Luebbing was again called to the stand and admitted that he had received presents from persons whom he had prosecuted, among others a music box from a Mr. Thomas, and also an occasional bottle of wine amounting, he said, to not more than a

dozen bottles; he had also received six bottles of catsup, and some milk which he had not paid for, though he had asked for a bill and intended paying for the milk. He then told upon cross-examination of a patent medicine company in which himself, Mr. Sterrett and Professor Fennel were interested. The capital stock was to be \$2,000. W. W. Thomas had paid \$500 in. Neither Mr. Sterrett nor Professor Fennel had paid anything into the partnership. Mr. Luebbing paid Dr. Sterrett \$250 for the formula for the pills, and he paid Professor Fennel \$100 "to have the formula analyzed," though at the time Professor Fennel was paid for the analysis he was not a member of the concern. The company had never been incorporated. The pills were never placed on the market, they having been burned where stored soon after being finished.

Attorney Creed, who acted as attorney for the Cincinnati druggists, gave some details of the method in which the cases



HON. JOSEPH E. BLACKBURN, PH.G.,

Republican nominee for the office of Food and Dairy Commissioner of the State of Ohio.

had been settled where pleas of guilty had been entered. Mr. Luebbing being called in rebuttal, denied the charge brought against him by Kroger.

Al. DeLank, a druggist of this city, then testified as follows:

I was one of the defendants in the first phosphoric acid cases. I went to the office of the Squire, and when I came in the constable took me to Mr. Luebbing. He expressed regret, and said that Mr. Fennel was also sorry, and advised me to go to Mr. Fennel and get his advice. On the way out he asked me what I was going to do. He then suggested that I pay the fine, and he would keep the docket open, and no one would be the wiser. I didn't think this good advice from a public officer by whom I was charged with an offense. We had some other conversation, and then Mr. Luebbing said that he was going to prosecute all the druggists on compounds they manufactured themselves, and that the contract made as to non-prosecutions was only in reference to proprietary medicines.

On cross-examination witness admitted that while the constable told him that the analysis and sample were in Luebbing's office, he went there of his own accord.

John Bauer of Milton and Sycamore streets, the next witness, said he had called on Dr. Sterrett when he was arrested for selling compounded wine. "He said if

I paid the costs and analysis fees," said the witness, "I would not be bothered for a year or a year and a half." He never appeared in the Squire's office, but the association's attorney, Jerome D. Creed, settled the matter.

On cross-examination, witness admitted that Dr. Sterrett told him that he had sent out books which contained the law in reference to such cases, but did not remember that he had enjoined him to comply with the law in the future.

On the following morning, Saturday, several witnesses were examined, but their testimony was not important. The hearing of the bribery charges in this city was concluded and the committee will meet in Columbus at the call of the chairman.

#### Hon. Joseph E. Blackburn, Ph.G.

The Hon. J. E. Blackburn, Ph.G., was nominated for State Dairy and Food Commissioner of Ohio at the Republican State Convention held at Columbus on March 10 and 11 last.

The great importance of this position, and the exciting contest that resulted in Mr. Blackburn's nomination over five opponents, makes this event one of unusual interest and importance.

We append a short sketch of the distinguished gentleman's career.

Joseph Ellis Blackburn, Ph.G., was born at the hamlet of Farmington, Colerain township, Belmont County, Ohio, on June 30, 1860.

With characteristic foresight he laid the foundations for future greatness by being born in a log cabin. He was too

young to take up arms in the defense of his country in the war that followed in 1861, but remained at home to protect his mother and two older brothers, while his father "shouldered the musket."

He attended the common schools of Martin's Ferry and Bellaire until he was nearly 12 years of age, when he applied for and received a position at the Belmont Glass Works, and laid another stone in the foundation to the "future greatness" alluded to, in the highly intellectual occupation of pushing a wheelbarrow laden alternately with coal and cinders. By doing this well he soon won promotion, rising to the position of foreman, which he lost, in 1887, by reason of the factory closing down.

He then embarked in the drug business, and shortly afterward entered into politics, but never held any public position until elected a member of the Seventy-second General Assembly of Ohio, on November 5, 1895.

Mr. Blackburn was married in 1879 to Dora C. Trueman, and they have one son, a promising lad of ten years, who looks like and is named after his father.

The degree of Ph.G. was conferred upon the future commissioner after completing the course in pharmacy at the Ohio Normal University, at Ada.

Mr. Blackburn enjoys a reputation for probity and integrity that ought to make him an ideal public official, and his practical experience in the retail drug business will no doubt enable him to administer the affairs of the important office of food and dairy commissioner in a manner which will not be unjust or burdensome to either the druggists or the public.

## The Druggist as a Liquor Seller.

Effects of High License in Philadelphia—Philadelphia Pharmacists Opposed to Selling Liquor—How it is Done in Massachusetts—Dissatisfied with the Raines Bill in Buffalo—A New Liquor License Law in Ohio.

### Effect of High License in Philadelphia.

PHILADELPHIA, April 4.—Owing to the large sum required to take out a wholesale license there are very few druggists in this city who meddle with this kind of business. Years ago some of the druggists here did a traffic in the rum business, but since the high license law has gone into effect there is no liquor sold in any of the stores without a physician's prescription. A druggist in Philadelphia cannot secure permission to sell liquor at retail no matter how much he desires, and the only kind of a license he can get is a wholesale, of which the cost is \$1,000 annually. The wholesale drug houses here generally have a wholesale license, as they do a considerable business in liquors. The wholesale license costs \$1,000 to cities of the first and second classes, third class cities \$500, and all other cities \$300. The license fee in boroughs is \$200 and townships \$100, and money derived from licenses goes into the city treasury. Every druggist has, however, an internal revenue license, which costs \$25 a year.

NO LICENSE REQUIRED FOR SALE ON PRESCRIPTIONS.

The law in relation to this subject in substance is as follows:

Druggists and apothecaries shall not be required to obtain licenses under the provisions of this act, but they shall not sell intoxicating liquors except upon the written prescription of a regularly registered physician, alcohol, however, or any preparation containing the same, may be sold for scientific, mechanical or medicinal purposes. Any one violating the provisions of this act shall be guilty of a misdemeanor, and, upon conviction thereof, shall be subject to the same penalties as are provided for. Provided, That no spirituous, vinous, malt or brewed liquors shall be sold or furnished to any person more than once on any one prescription of a physician. And provided further, That any person who shall wilfully prescribe any intoxicating liquor as a beverage to persons of known intemperate habits, shall be guilty of a misdemeanor, and, upon conviction, shall be subject to the penalties and fine as prescribed.

### DRUGGISTS DO NOT WANT TO SELL LIQUORS.

A number of the most reputable druggists in this city were seen by the representative of this paper in regard to the sale of liquor by them, and in every instance they were against this kind of business.

Mr. Long of Long & Neely, Twelfth and Chestnut streets, said: "We do not care to cater to a liquor trade and all we sell is in prescriptions, otherwise we would not deal in it at all."

George B. Evans, the leading cut rate druggist in the city, said that if it were not for the physicians' prescriptions he would not have any liquor in his establishment, as he is opposed to the sale of it and believes that all druggists



throughout the city are of the same opinion and they do not wish to cater to this class of trade. He also said he was "down on rum in every way" and was opposed to selling it except for medicinal purposes.

Chas. G. Dodson, 127 South Fourth street, said: "I do not wish to have anything to do with the liquor trade outside of sales for medicinal purposes."

At Llewellyn's drug store on Chestnut street, west of Broad street, they coincided with the rest of the retailers and are opposed to handling liquor in any way except for strictly medicinal purposes.

A. L. Wingert, at Ridge and Girard avenues, said: "I have been in the business for 17 years and in all that time I never handled liquor except on physicians' prescriptions. I remember the time when druggists could sell rum, but even then many of them were opposed to it and were glad of the change which forbade them doing it."

### How They Manage the Sale of Liquor in Massachusetts.

BOSTON, April 4, 1896.—There have been no changes as yet in this State in the law respecting druggists' licenses for the sale of liquor. This law requires that to obtain a sixth class (a druggist's) license, costing \$1, the applicant should receive the indorsement of the State Board of Pharmacy. Active work, however, is being done to have the law changed, and the matter is expected to receive attention during the session of the General Court. Chairman Whitney of the State Board in speaking of the subject yesterday said he looked for some action on the part of the House within a few days.

The board, in anticipation of early legislation, has prepared a series of circulars, which will be sent to every druggist in Massachusetts, calling attention to the provisions of the law, and requesting all who have been derelict in their observance to live closer to the letter. The circular will not be given out for publication until after the Legislature takes action.

#### WHAT BOSTON DRUGGISTS SAY ON THE LIQUOR QUESTION.

A number of prominent druggists in Boston were interviewed for the AMERICAN DRUGGIST as to their opinion upon the sale of liquor by pharmacists. Those who have been seen are prepared to admit one fact above others, and that is, the liquor law is far from being perfect. In the opinion of some, the impression given the public that the average druggist carries on his business for the profit there may be in selling liquor, comes from the "advertising" by the police. Many unthinking and irresponsible members of the force regard the drug store as a liquor shop and do not hesitate to retail all kinds of ridiculous stories about them.

#### PHARMACISTS SHOULD NOT SELL LIQUORS.

Not a few of the druggists who were talked with say emphatically that pharmacists should not sell intoxicating liquors at all. This is the sentiment of the president of the Apothecaries' Guild, C. P. Flynn, who, perhaps, voices the opinion of the majority of the members of that association. Mr. Flynn said in an interview:

Druggists should not be compelled to furnish bonds. The public should be made to understand that there are druggists who are not rum sellers, but pharmacists being obliged to sell liquor. The law should ferret out the violators of their licenses and punish them.

The laws are not perfect, neither is the Board of Pharmacy. It behooves all well wishers of pharmacy to back up the board, because the saloon druggist is a hard competitor and he should be compelled to restrict his business as they do; then, perhaps, he would not have quite so many of the others' customers.

A pharmacist should be what he is expected to be—respectable; he should not prostitute his calling; he does not give his best years in the pursuit of his pharmaceutical knowledge to become a barkeeping druggist. If he chooses the latter plan then he should pay a regular liquor dealer's license and change his sign.

Among the other druggists seen there seems to be a desire to await the action of the Legislature before saying anything for publication. There has never in the history of license been so great an interest taken by druggists as at the present time.

### The Raines Bill in Buffalo.

BUFFALO, April 16.—Very few druggists, it is thought, will take out licenses under the Raines bill. Physicians seldom give a prescription calling for whisky or brandy, and it necessarily follows that the average druggist will fail to squander even \$50 on a license.

#### OPPOSED TO THE RAINES BILL.

The druggists of Buffalo, individually and collectively, condemn the bill in no measured terms, whether it affects them personally or not. In nearly every instance it does affect each druggist, as, with rare exceptions, they hold licenses. While no druggist in Buffalo depends on the sale of liquors for any great proportion of his revenue, yet his liquor trade, be it large or small, brings him other trade. A number of druggists sell bottled goods for home consumption, and while they feel that, in one sense, they cannot afford to pay an additional \$250 for this privilege, as their income from the sale of liquor is not large enough to warrant indulgence in so expensive a license, yet in another sense they cannot afford to be without the extra license, as the loss of this liquor trade will entail a greater and far more serious loss of trade in the drug line. Stoddard Bros., at 84 Seneca street, leading retailers, are among this class, and they emphatically disapprove of the Raines bill, particularly of the provisions affecting pharmacists.

### A New Liquor License Law in Ohio.

CINCINNATI, OHIO, April 5, 1896.—There has been considerable talk in all parts of Ohio during the past few days over a bill passed in the Legislature on the 1st inst. in reference to the sale of liquor by druggists. The measure in question was introduced by Member Whittlessey and was passed by a bare majority vote in the Senate. Before this was done, however, Mr. Shryock offered an amendment to Section 2 of the Dow law, to which the bill passed is supplemental. The amendment inserted the word "knowing" in the clauses prohibiting the selling of liquors in townships or municipalities which have voted saloons out of existence. The amendment failed of adoption. A sudden scramble set in and but nine senators voted. The chair immediately ordered a call of the Senate and 24 answered. Mr. Shryock withdrew his amendment and a vote was

taken on the bill, with the result that it got barely enough votes to pass it, no one voting negatively.

#### PROVISIONS OF THE NEW LAW.

The provisions of the bill are that druggists shall sell liquors only on prescriptions written by physicians in active practice. Each prescription shall be dated, and filled but once, and druggists must keep a record of each one, showing to whom it was sold and for what purpose. This record shall be open for public inspection. Violations are made punishable [by a fine of from \$25 to \$100. The new law will not affect the druggists of this and other large cities to any extent, but the pharmacists in small towns and villages will doubtless be caused more or less trouble and annoyance by it. The measure was introduced to do away with the drinking features in drug stores in the smaller places. It will no doubt have the effect of closing out a large number of so-called pharmacies. The legitimate druggists who do a strictly drug business will not be affected by the measure, as they derive no revenue worth speaking of from that source.

#### WHAT CINCINNATI DRUGGISTS SAY.

The consensus of opinion among local druggists is that the amendment to the above bill should have been adopted. In that event the law would have applied to local option places instead of being general and taking in the entire State. In the event that the measure passes the House, thus becoming a law, however, it will close out a large number of so-called drug stores in small places where the liquor traffic is the principal source of revenue. This is the object of the law, and for that reason it is thought that it should not apply to cities of the first and second class. The opinions of local pharmacists expressed to the writer will doubtless be of interest:

Albert Meininger of the Ohio Board of Pharmacy: "I would not object to the law if it does not apply to first-class druggists, who sell very little liquor and none as beverage. The Shryock amendment should have been adopted by all means."

Otto Stein of Stein-Vogeler Drug Company: "Local druggists sell very little whisky or other intoxicating liquor, but it is a reflection on them to be classed as saloon pharmacists."

Dr. John C. Otis: "I have not given the bill much thought, but I coincide with my professional brethren in the opinion that it should not apply to places like Columbus, Cleveland and Cincinnati. If it has the effect of driving men out of business who are running saloons in the rear of their places in small towns, it is not so bad. I think the physicians in cities are also opposed to the measure."

Albert Vogeler: "The Legislature will make a mistake if it does make the measure apply to local option places only. All the druggists in the city are opposed to the measure in its present shape."

R. H. Featherhead: "I don't care much about the bill, as I sell scarcely a pint of liquor in a month. I must say, however, that some local druggists sell whisky at their soda fountains, but still manage to maintain their standing and do a big prescription business. Why, that thing would ruin my business in a short time."

George Kylius: "I can easily furnish prescriptions for the liquor I sell, for it is all sold for medicinal purposes only."



It is rather humiliating, though, to be classed as a saloon keeper and below the dignity of a first-class pharmacist."

Dr. Louis Sauer: "We don't need any such law to regulate things here, but I am not prepared to speak for the rest of the State. It may prove to be a good thing in the rural districts."

—Will S. Wagner: "The law will not affect me, as I sell no liquors except for medical purposes. I don't know how it will be received outside the city."

### Philadelphia Manufacturers to Fight the Pure Food Commissioners.

PHILADELPHIA, April 2.—The Pure Food Commission's attempt to legislate the sale of drugs in this city is not meeting with very much success. It was given out a short time ago by one of the agents of this commission that steps would be taken to bring suit against a number of druggists and dealers who are handling certain preparations of malt and cod liver oil, but it seems that up to to-day nothing has been done. It is understood that the manufacturers are prepared to make a fight against the Commission, as they maintain that all

the goods that are manufactured here are what they are said to be, and in no way are they adulterated. The very best legal talent in this city has been engaged, and if the Commission take any steps in the matter the fight promises to be a hot one.

### A Defaulting Secretary.

A dispatch from Des Moines says: Suel J. Spaulding, the secretary and treasurer of the Iowa Board of Pharmacy Commissioners, has been arrested for misappropriation of funds. He is short \$13,000 in his accounts, and there is very little prospect of the State ever recovering a cent. Extensive dealings on the Board of Trade, which have been carried on for some time, caused his downfall, and he has no one to blame for his disgrace but himself. Since Treasurer Herriott came into office Spaulding has not turned over a cent. The commission began an investigation, which resulted in the disclosures above. It now transpires that Spaulding's bond, which was for only \$5,000, expired last June and had not been renewed. Spaulding is now in jail, being unable to secure bondsmen, and his wife and child are grief stricken.

or poisons in New York City except by a registered pharmacist or a licentiate in pharmacy." The bill changes the existing law only in the introduction of the clause quoted above.

W. H. Meek of East Douglass, Mass., will open a new store in Providence, R. I., within a month or so and will make it thoroughly artistic in every respect. Mr. Meek was one of the most popular members of the class of '86 of the Philadelphia College of Pharmacy and was with Hazard, Hazard & Co., under the Fifth Avenue Hotel in New York City, for some time after graduation.

Among the New York pharmacists who will draw soda this season from new Low Art Tile fountains are: J. S. Milerick of Albany, E. W. Decker of Mariner's Harbor, G. Bastian of Dansville, John Esterheld of Rochester, F. N. Mason of Port Jervis, S. S. Parsons of Whitney's Point, C. D. Allee of Freeport, T. C. Fletcher of Babylon, Paul Trentler, H. Milock and J. Horton Uhle of New York City.

Mrs. Wm. O. Allison, wife of the publisher of the *Oil, Paint and Drug Reporter*, died suddenly of pneumonia in Paris on March 31. Mrs. Allison had been in Europe with four children for over a year past, and was to have sailed from Havre for America on the 11th. As it is, her body is expected to reach here on Sunday, and it will be interred on its arrival at her late home, at Englewood Cliffs, N. J. Much sympathy is expressed by the trade for Mr. Allison in his loss.

The young woman who committed suicide in Central Park last week has been identified as the sister of Luther F. Stevens, formerly professor in the Brooklyn College of Pharmacy, and now a prominent member of the Kings County Pharmaceutical Society. The deceased will be remembered by many of the members of the American Pharmaceutical Association who attended the meeting in Chicago in 1893, at which Miss Stevens was present with her brother. She was an artist of local repute.

### THE BOWLING CLUB SCORE.

The standing of the clubs is now as follows:

	Won.	Lost.	High Score.
Dodge & Oleott.....	23	8	853
Colgate & Co.....	20	4	873
Parke, Davis & Co.....	15	5	842
Whitall, Tatum & Co.....	15	7	722
McKesson & Robbins.....	14	8	780
Bruen, Ritchey & Co.....	15	9	802
R. W. Robinson & Son.....	12	8	773
Max Zeller.....	12	10	748
Lanman & Kemp.....	11	13	800
Merck & Co.....	7	13	710
Seabury & Johnson.....	8	16	733
Powers & Weightman.....	7	17	778
Lazell, Dalley & Co.....	6	18	682
Schieffelin & Co.....	5	21	684
Tarrant & Co.....	4	22	676

President-elect Kemp of the New York College of Pharmacy gave a dinner at the Buckingham Hotel March 26, when the guest of honor was the retiring president, Samuel W. Fairchild. Among Mr. Kemp's guests were William M. Massey, John R. Caswell, A. H. Mason, Herbert D. Robbins, Edward Kemp, Jr., Arthur H. Elliott, George B. Wray, Dr. Charles F. Chandler, O. J. Griffin, Charles Rice, Adolph Henning, George W. Kemp, H. N. Fraser, George Massey, Reuben D. Smith, Albert Plaut, William Jay Schieffelin, H. W. Atwood, C. O. Bigelow, Thomas F. Main, A. T. Kemp, N. W. Monot, Virgil Coblentz, Theodore Lewis, Charles S. Erb, H. H. Rusby, Ernest Molwitz, Charles Holzauer and Charles F. Schlensner.

## IN GREATER NEW YORK.

New York, Brooklyn, Jersey City and Vicinity.

John Maglio of Dover and H. H. Love of Bordentown, N. J., have just put in new Low Art Tile fountains.

W. H. Meyers is a recent acquisition to the staff of Daggett & Ramsdell in the Thirty-fourth street store.

August Uhl, the pharmacist, now at 52 Beaver street, is soon to move into new quarters in the Lord's Court Building, on New street.

Paul Treuler, 2436 Second avenue, is making a number of improvements in his store, and has contracted among other things for a Low's Art Tile Fountain.

Henry B. Platt has again been chosen president of the Fulton Club, an organization composed largely of wholesale druggists and manufacturing pharmacists.

F. L. Cutts is making extensive alterations in his store at 981 Fulton street, Brooklyn, with the help of the New York Store Fixture Company, 152 Bank street, New York.

Edwin G. Klein, who graduated from the New York College of Pharmacy in the class of '92, has recently been graduated in medicine from the Bellevue Hospital Medical College.

B. Ambler, Langley & Michaels Company, San Francisco; S. B. Rowley, Hero Fruit Jar Company, and Wm. Kuemmerle, Jr., of Philadelphia, were among recent visitors to the city.

Mary Young, who keeps an employment bureau at 124th street and Third avenue, New York, has commenced suit against Otto R. Postler of Bath Beach to recover \$25, which she claims as a matrimonial fee.

Wm. O. Allison, the publisher of the *Oil, Paint and Drug Reporter* and the *Painters' Magazine*, contemplates a change of location, and has secured the first floor in the Dalley Building, corner of William street and Maiden lane.

Hugo Schmelz, long established at 576 Third avenue, corner Thirty-eighth street, is making preparations to move directly opposite his present location. The new store will be fitted up by the New York Store Fixture Company.

Henry Vin Arny of New Orleans was in New York last week. He has been studying in Göttingen University, Germany, for the past four years, and was this year graduated Ph.D. (*magnam laude*) from that famous institution.

The Upjohn Pill & Granule Company will vacate their present premises at 60 Maiden lane and move to 92 Fulton street, on or about May 1. The first floor of the new premises is to be fitted up as an office, and a handsome display is to be made.

The Harlem Club is a swell uptown organization which numbers several well-known wholesale druggists among its members. Ed. G. Wells of Crittenton & Co. recently won the first prize in a pool tournament held in the club rooms.

W. B. Smith, a druggist, 48 years old, of Monmouth, Ill., died of pneumonia on the steamship "Madiana," which arrived in New York recently from the West Indies. Mr. Smith was one of a party of excursionists who have been cruising in the West Indies.

Suit has been brought in the United States Circuit Court by De Laire & Co. of France, to restrain the Elizabeth Chemical Company of Third avenue and Rankin street, Elizabeth, from manufacturing vanillin. The plaintiffs seek an injunction and remuneration. Suit was brought through their Washington attorneys, Pollock & Mauro.

Senator Page of the Seventeenth District has introduced a bill in the New York State Legislature to prohibit the sale of "medicines, medicinal preparations

Archibald Wilson, who for a number of years was the night manager at Perry's drug store in the Sun Building, died March 2, at his home, 20 Clarkson street, from catarrh of the stomach, from which he had suffered for over two years. He was about 35 years old and had been in the drug business from his youth. He started when a boy in J. N. Hegeman & Co.'s pharmacy opposite the Sinclair House and subsequently was employed five years at Hudnut's store in the old Herald Building, at Broadway and Ann street. When Dr. Charles J. Perry opened the drug store in the Sun Building, eight years ago, Wilson went with him from Hudnut's, and was placed in charge of the laboratory, and was afterward made night manager of the store.

In the passing away of Ferdinand Lascar, apothecary to the DeMilt Dispensary, this city, who died at his home, 157 East 157th street, on Wednesday, April 1, we have lost a worker who did much by his pen for the practical betterment of working druggists. His name will be familiar to a host of readers as the author of numerous papers on subjects pertaining to technical pharmacy. The greater bulk of his published papers have appeared in the *Druggist's Circular*, but he was a frequent contributor to the *Pharmaceutical Record* when that journal was edited by Professor Bedford. He also contributed a number of interesting and valuable articles on pharmaceutical topics to the consolidated AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD during the past three years. As noted above, Mr. Lascar, up to the time of his death, occupied the position of apothecary to the DeMilt Dispensary, one of the oldest and most reputable institutions of its kind in this city. The duties of an apothecary to an institution of this kind are not so exacting as to prevent the carrying on of a certain amount of research work, and Mr. Lascar was enabled while carrying on his regular duties to prosecute many researches in pharmaceutical chemistry to a satisfactory conclusion, and the results have been published from time to time in the pharmaceutical press. His early education was received in Denmark, of which country he was a native. Soon after emigrating to the United States he settled in New Orleans, and his services as chemist to the local government there during the yellow fever outbreak are remembered to this day. He was appointed city chemist of New Orleans, and held this important position up to the time of his removal to New York.

## NEW YORK STATE.

**BUFFALO, April 5.**—The annual meeting of the New York State Pharmaceutical Association, will be held on June 23 at Buffalo.

At a recent meeting of the Erie County Pharmaceutical Society it was unanimously decided to make every effort to have this next meeting of the State association the greatest on record.

A large committee of representative druggists has been appointed to take the matter in charge, and all agree to perfect such arrangements as will induce everybody to come to this meeting and outing.

Buffalo is well equipped for hotel accommodations, and can supply the best at moderate prices.

According to the reports received from different parts of the State this Buffalo meeting will be the largest and most in-

teresting in the history of the association, for the business that is to come before this meeting is of great importance.

The programme in detail will be published later on. The above is taken from the circular of the committee, which concludes: "We have both the ambition and desire to entertain you, and will guarantee your stay with us, one long to be remembered. By order of the committee, Plin S. McArthur, Local Secretary."

### THE BETA PHI SIGMA BANQUET.

The Beta Phi Sigma Fraternity of the Buffalo College of Pharmacy held their seventh annual banquet on Thursday evening, April 2, at the Niagara. It was a most enjoyable affair, the menu being especially fine and thoroughly appreciated. After a song by the quartette, and some delightful remarks by Dr. W. G. Gregory, Toast-master L. A. Swanson offered the following programme: "Class of '96," C. L. Abbott; "The Goal," L. C. Baldwin; "In After Years," L. L. Bodine; "The Folk Lore of Drugs," Dr. J. R. Gray; "College Life," G. A. Briggs; "The Juniors," L. B. Batchelor. This was followed by a poem, "The Faculty," by J. H. Hilligass, and a song, "Sailor's Glee," by the quartette, which ended this "feast of reason and flow of soul."

The Buffalo *Druggist* is about to suspend, or change hands, owing to the ill-health of the editor, Andrew M. Clark. This is to be regretted, unless the journal falls into the hands of some one fully as capable as Mr. Clark.

### STUDENTS ASK FOR DR. BENEDICT'S RESIGNATION.

An article appeared in the Buffalo *Courier* of March 27, relative to the action taken by the undergraduates of the College of Pharmacy in that city, who took umbrage at an article written by Professor Benedict of the college, and published in the *American Medico-Surgical Bulletin* on the following subject: "Shall the Physician Carry His Own Drug Stock?" The students considered it a reflection on the profession of pharmacy, and at a meeting of both classes adopted resolutions calling upon the faculty to remove Dr. Benedict. No action has yet been taken, but Dr. Wendt is, for the present, hearing Dr. Benedict's classes. An able and dignified defense, and definition of his position, was written to the *Courier* by Dr. Benedict, and duly published.

### Minor News Notes.

Monroe's pharmacy, at Dunkirk, was recently damaged by fire to the extent of \$3,000.

We are informed the Fox & Dygert pharmacy in the Yates Hotel, Syracuse, has been sold.

Joslyn & Co. of Syracuse have moved from Railroad street, around the corner, opposite the new depot.

Chas. C. Stewart, druggist at Auburn, will soon move from 83 East Genesee street, to the corner of North and Genesee streets.

Dr. E. H. Davis, of E. H. Davis & Co. of Rochester, is taking a Southern trip. He will visit the Bermudas before he returns.

The Geo. Schaefer pharmacy, corner of Allen and Main streets, Buffalo, will hereafter be known as the Red Jacket Pharmacy.

J. H. Smellir of Hammondsport has added a new plate-glass front to his store. He is now agent for several high grade bicycles.

Mason Bowen, compounder for the Dr. Sykes Medical Company of Rochester, is, we learn, putting a preparation on the market called "X Rays."

The drug store of William G. Mothersell of Watertown was closed by the sheriff on last Tuesday, on confessed judgments aggregating \$2,800.

William W. G. Peck of Potsdam intends to dispose of his drug business, and will hereafter devote his time and energies to the manufacture of trousers.

Walter Collette, a druggist at Buffalo, recently pleaded guilty in the County Court of a technical violation of the Pharmacy act. Sentence was suspended.

F. N. Burt, lithographer and engraver, at Buffalo, will soon move into the five-story building formerly occupied by Foster, Milburn & Co., corner of Swan and Ellicott streets.

W. A. Rogers will soon open a new store corner of Hanlow and Alexander places, Buffalo. Mr. Rogers was formerly employed at the Dambach pharmacy.

A report from Watertown, dated March 18, says: "The drug store of William G. Mothersell, in this city, was closed by the sheriff on confessed judgments aggregating about \$2,800."

The larger retailers among the pharmacists of Buffalo are considering the advisability of forming a syndicate to buy certain articles largely used during the summer months, thereby saving the jobbers' profit.

Dr. Julius Kerng of 1066 Broadway, Buffalo, has sold his store to Z. Z. Kielawa, and it will hereafter be known as the White Eagle Pharmacy. Dr. Kerng will have an office in the store, and will practice medicine.

The circular of the treasurer of the Erie County Pharmaceutical Association has been issued. The association is in a most flourishing condition, the members, enriched by past experiences, feeling very hopeful for the future.

Peterson Bros., druggists of Buffalo, have moved their stock into the store vacated by the Coulson Drug Company, corner of Seneca and Michigan streets. They have been located on Seneca street opposite the Erie Depot.

H. A. Scheck, graduate of the Buffalo College of Pharmacy, is now senior prescriptionist at O'Brian's pharmacy, on West Eagle street, Buffalo. Mr. Scheck was formerly employed at the Roese pharmacy on East Genesee street.

Covert's pharmacy, located in the Hotel Burns, Syracuse, will be moved a few doors below on Fayette street. The change was made necessary by the enlargement of the hotel lobby, which takes in the space now occupied by the drug store.

H. C. Giesler, the popular and well-known pharmacist of Fulton, accompanied by his wife, has gone to Denver for a month's stay. During his absence his store is in charge of George W. Bush of Mexico, a competent pharmacist and a thorough business man.

J. P. Jones, representing Sharp & Dohme of Baltimore, visited Buffalo a

short time ago. He still carries his rabbit's paw, and said talisman has proven so valuable, so thoroughly reliable, that he has contracted for a job lot, and will present each of his trade with one the coming year.

The case of the United States against Druggist Edward A. Kingston of Main and Ferry streets, who was charged with smuggling phenacetine into the United States from Canada, was taken up March 24 in the United States Court at Utica. After a fair trial Mr. Kingston was acquitted, the government failing to make out a case.

### Enforcing the Law in Utica.

UTICA, April 4.—The threatened enforcement of the Pharmacy law has had a decided effect upon the grocerymen here. When the grocerymen were first notified that the Pharmacy law must be obeyed, and that in case of violation they would subject themselves to prosecution, they felt very indignant over the severe restrictions, and at the Retail Merchants' Association meeting it was decided to make a test case of the constitutionality of the law. The State Board of Pharmacy held a meeting at Syracuse, soon after the grocerymen had been notified to discontinue the sale of common drugs, and drafted an amendment to the law so as to prevent the sale of the common household drugs in all stores. The grocerymen received notice of the board's action, and this had an anodyne effect upon their irritable feelings.

It is currently reported, and upon (seemingly) good ground, that Groceryman W. H. Hackett is about to open a drug department in his meat market and grocery store, and has engaged one of Utica's Retail Druggists' Association members to take charge of the same in the near future.

### FRANKFORT GROCERYMEN FINED.

The grocerymen in Frankfort have received a Supreme Court summons and complaint for violation of the poison and pharmacy laws.

Secretary Dawson of the State Board secured evidence of the sale by the grocers of poisons, such as carbolic acid, laudanum, paregoric, etc. Fines were imposed as follows: John Lufta, \$150; F. P. Farrell, \$200; Oscar Wegner, \$100 and costs in each case, which amounted to \$26.

George L. Hill, 230 Genesee street, Utica, has sold his drug store to Schuyler Van Wheeler of Holland Patent. Mr. Van Wheeler took possession April 6. Mr. Hill will probably take up his residence in New York City.

### New York State Board.

One hundred and twenty candidates presented themselves for examination before the State Board at the meeting held in Syracuse February 28. The names of the successful candidates are:

Edwin K. Harnish, Honeyoy Falls.  
Charles Greenberg, Brooklyn.  
Louis E. Blandy, Mayville.  
Frank J. Blanton, Buffalo.  
William M. Ohlandt, Jersey City, N. J.  
Edgar Ferris, Westchester.  
George A. Anderson, Syracuse.  
Aaron Becker, New York.  
John P. Murphy, New York.  
Charles H. Smith, Oswego.  
Byron A. Gifford, Watertown.  
James W. Barnes, Jr., Vergennes, Vt.  
William H. Bush, Albany.  
Russell S. Gardner, Troy.

John S. McEwan, Cooperstown.  
Charles G. Straub, Middleburg.  
John A. Given, North Tarrytown.  
Allen L. Remington, Syracuse.  
John H. Vosburgh, Rosendale.  
Frank E. Russell, Deposit.  
Joseph F. Flood, Penn Yan.  
Howard W. Baer, New York.  
Harry W. Butts, Watkins.  
Stiles C. Hall, Jamestown.  
Richard J. Thomson, New Rochelle.  
Otto Neubert, Mount Vernon.  
William C. Briggs, Jamestown.  
Harold Le F. Brown, Jamestown.  
Aaron Gordon, New York.  
Jirah H. Kellogg, Hicksville.  
Frank J. O'Rourke, Whitestone.  
Theodore M. Millsaugh, New York.  
William A. Schmidt, Long Island City.  
Albert Jacobson, New York.  
Oscar B. Chapman, Clayville.  
Thomas F. Nugent, Utica.  
Charles J. Zipp, Utica.  
Charles W. Ahlen, Poughkeepsie.  
Ralph B. Channell, Malone.  
Joseph W. Dessert, Glens Falls.  
David R. Dorn, Esperance.  
James W. Houston, Malone.  
Frank K. Lynch, Malone.  
Jesse F. Montanye, Troy.  
Clarence W. Ward, Amsterdam.  
Stanton Champlain, Yonkers.  
Jake Davidoff, New York.  
Elmer J. Dowell, Cornwall-on-Hudson.  
Frederick G. Koch, New York.  
Hermann H. F. Schlaeger, Paterson, N. J.  
Sumner S. Shears, Malone.  
George F. Briggs, Binghamton.  
Oliver E. Dake, Otto.  
Archie A. Johnson, Jamestown.  
Percy A. Lyon, Owego.  
Lewis A. Meyerhoff, Rochester.  
James T. Payne, Olean.  
James E. Smith, Welland, Canada.  
Nelson W. Springsteen, Philadelphia.  
Elester A. Swanson, Jamestown.  
Malcolm J. Wilcox, Olean.  
George O. Willmarth, Mexico.

The following were passed as assistant pharmacists, viz.:

James A. Melrose, Poughkeepsie.  
James Lindsey, Schenectady.  
Robert W. Andrews, Poughkeepsie.  
La Belle Claire Noyes, Auburn.  
Charles L. Ogden, Iion.  
Oscar G. H. Towne, North Tonawanda.  
Wm. C. Fehrmann, North Tonawanda.

The next examination by this board will be held on Friday, June 19, at Albany, Plattsburg, Rochester, Syracuse and Yonkers, and the next meeting will be held on Tuesday, June 28, at Buffalo. The board has successfully prosecuted a case against Dr. P. Stolfi of New York, for conducting a drug store at Mount Vernon without a licensee of this board in charge. He paid to the board \$100, the amount of two penalties, and to the board's attorney \$47 for costs in the action.

## CONNECTICUT.

James Hair has succeeded Joseph V. Brennan as city pharmacist in Bridgeport.

Druggist George F. Travis of Danbury has engaged the William Dulin place, at Mahopac Lake, and will take possession April 1.

The People's Drug Store in Charleston, Conn., has been bought by Oscar Lily, and the new proprietor has taken possession.

George N. Alling, for many years at the corner of Grand and State streets, New Haven, will soon seek quarters in another part of the city.

Frank E. Belcher has purchased the Pine street drug store at South Manchester, and is conducting it under the firm name of F. E. Belcher & Co.

The drug business of Arthur Lyonais, situated at the corner of Chestnut and Elm streets, Spencer, has been purchased by Charles D. Fortier of Lowell.

Wm. Wheeler suffered considerable of

a loss by the big conflagration that visited Danbury recently. Mr. Wheeler was able to continue his business without interruption, however.

Walter H. Lewis has resigned his position at Apothecaries' Hall, Danbury, after several years of service, and has gone to Lynn, Mass. William McGowan has succeeded him.

New Low Art Tile fountains have recently been placed in the stores of S. Gladding, Jr., & Co. of Naugatuck, S. Goodrich & Co. and F. B. Edwards of Hartford, and C. H. Dougal and T. M. Burns of Torrington.

Messrs. J. O. May and W. H. Wood, of the firm of May & Wood, druggists, in Union City, have dissolved partnership. J. O. May having purchased W. H. Wood's interest in the business. Mr. May will manage the store for the present.

Theodore Mosher of Chicago died in that city a couple of weeks ago, aged 51 years. The remains were brought on to Meriden for interment. He leaves a brother, W. W. Mosher, who conducts a drug establishment in the Silver City.

Druggist A. B. Hall of New Haven has contracted for a brick block to be erected on Chapel street, near Howe. The building will be 26 x 59 feet, and the flats will have five and six rooms each, with all the latest improvements. The structure will cost about \$8,000.

The springs at Highland Park, Manchester, Conn., have been deeded by Case Brothers to the Tonica Springs Company, and the company have released the fine property to Johnson & Miller of Hartford. The members of the firm are Dr. M. M. Johnson, a well-known physician, and the junior partner is a specialist in mineral waters, from San Francisco. The headquarters are at present in Hartford.

James F. Woods of A. F. Woods' Sons, druggists, on Church street, has returned from Central America. He has been absent about a month, and during that time he visited Jamaica, Port Limon, Costa Rica and Cartagena, and the United States of Colombia. Mr. Woods made the trip both ways in the ill fated steamer "Ailsa," which was sunk in the New York Bay by a French steamer a few hours after Mr. Woods landed.

A good story is told by Druggist George Cook of Darien. A short time ago he had occasion to leave his store for some time and he left Dr. F. W. Darmer in charge. In the afternoon a colored woman entered the establishment and asked for some flesh-colored face powder. Under the circumstances, Dr. Darmer was somewhat perplexed as to just what to give her, and after pondering on the matter for a few minutes, decided to give her some lamp black. She went her way, but shortly afterward returned with the package, accompanied with a note from a well-known lady in town, and which read: "Mr. Druggist—The face powder was not for my servant, but for myself." The doctor was rather abashed over the note, but he immediately rectified the mistake.

At Meriden they are discussing the question of appointing a milk inspector, and nearly all the druggists favor the suggestion. Selectman Ellsbree, who conducts a well-appointed pharmacy, was telling the other day how he obtains pure milk. He said that a short time

ago he became dissatisfied with his milk and notified his milkman of his dissatisfaction, but this didn't do much good. So he bought a lactometer and asked his milkman when he brought his supply to stop a while until he tested the milk. The milk dealer was surprised, but said nothing. Druggist Ellsbree showed him the result of the test, which was by no means favorable to the dealer. A few suggestions were made by the druggist, and since that time Mr. Ellsbree says he gets pure milk.

### Virginia Board.

The following is a list of those who passed the examinations of the Virginia State Board of Pharmacy, held during the week of March 21, and brought to a close Saturday night:

Registered Pharmacists—W. Withers Miller, Richmond; T. H. Brenaman, Harrisonburg; John F. Gibbons, Richmond; B. S. Preston, Richmond; J. S. Mancha, Claremont; W. L. Lyle, Bedford City; Claiborne Robbins, Richmond; Robert Gibson, Alexandria; F. W. Robertson, Baltimore, Md.; T. O. Palmer, Baltimore, Md.; W. Allison Stores, Portsmouth; W. B. VanLeer, Roanoke; R. J. Wood, Edmund Christian, E. W. Sanford, Richmond; Eugene J. Bass, Portsmouth; T. B. Taylor, Manassas; C. E. McKimmie, Ferguson's Wharf.

Assistant Pharmacists—G. Fitzhugh, Charlottesville; Jesse N. Greene, Norfolk; C. P. C. Timberman, Alexandria; A. T. Gray, Richmond; T. B. Congdon, Phoebus; William M. Turner, Richmond; Frank D. Mears, Portsmouth; C. L. Carter, Norfolk; R. S. Fitzgerald, Petersburg; W. E. Snellings, Jr., Manchester; W. Q. Robey, Jr., Herndon; W. S. Langhorn, Jr., Portsmouth; E. W. Powell, H. H. Robinson, Richmond.

After the adjournment of the Examining Board the members were called together for reorganization. E. R. Beckwith of Petersburg presented his credentials as a member for the term of five years, having been recently appointed by the Governor, and, upon motion, he was unanimously re-elected secretary for the term. Prof. T. Ashby Miller of Richmond was also re-elected president for the ensuing year. The other members of the board are: Robert Brydon of Danville, C. P. Kearfoot of Martinsville, and J. L. Avis of Harrisonburg.

## MASSACHUSETTS.

### DRUGGISTS ENTERTAIN PROMINENT MEN.

BOSTON, April 6.—A meeting of the Boston Druggists' Association was held last Tuesday evening at Young's Hotel, and there were present as guests Dr. S. H. Durgin of the Board of Health, and Hon. J. R. Murphy of the Water Board. Dr. Thomas L. Jenks touchingly alluded to the last meeting of the association, when the late Governor Greenhalge was present as a guest of honor. He proposed a toast which was drunk in silence, the entire company standing. President E. C. Marshall presided. After dinner Dr. Durgin gave an interesting talk on "The Sanitary System of Boston."

### CAUGHT IN COLORADO.

Franklin H. Martin, the Boston druggist, who was arrested in this city on a charge of marrying two women, and then defaulted his bail, has been arrested in Leadville, Colo., where he was living under the name of H. H. Hines.

### RECEIVED THEIR CERTIFICATES.

Certificates have been issued to the following applicants by the Board of Registration: Elbern T. Bowers, Boston; William H. Morse, Worcester; Frank B. Simmons, Woonsocket, R. I.; Ed-

mund F. O'Connell, Holyoke; Arthur S. Spofford, Keene, N. H.; Ernest L. Noyes, Leominster; William Hobbs, Athol; Frank N. Abare, Boston; Henry M. Friedman, Waltham; William J. Schoof, Melrose; Guilbert Roy, Fall River; Ernest G. Burridge, Somerville; Roscoe P. McFadden, Bath, Maine; William C. Crowley, Andover; Arthur L. Green, Beverly; John F. Thompson, Somerville.

There were 87 applicants for examinations at the last two sessions of the board.

### DEATH OF ANDREW LEE OF MANCHESTER.

Andrew Lee, the well-known Manchester druggist, and of the firm of A. Lee & Sons, died at his home in that town on Thursday, March 19. He had been engaged in the drug trade for many years, his first venture being in a store in the Franklin Building. During his life he had stores in Boston, Lynn, Lowell and Gloucester, and was one of the oldest druggists in the state.

### LEGISLATIVE MATTERS.

At a recent hearing held in the State House, on a petition to restrict the sale of opium, Canning & Patch, who approved the plan, were represented.

An adverse report from the committee of the legislature, to which was referred the proposition to prohibit the sale of cigarette tobacco, has been made.

### Of Interest to the Trade.

Albion W. Parkhurst, a Gloucester druggist, has offered his creditors 25 cents on the dollar.

William Grace is fitting up his drug store on Watertown street, Nonantum, Newton.

Many improvements are being made in the drug store of John M. Wilson, at Groveton, N. H.

A complete transformation is being made in the drug store of Herbert Newman, in the T. H. Norton Building, at Warren, Maine.

Charles Nelson, formerly a clerk in the Theodore Metcalf Pharmacy in Boston, will have charge of the new drug store in Grace's Block, North Newton.

W. F. Neal of West Derry, N. H., and Hutchins & May of Groveton, N. H., have added Low Art Tile fountains to their stores.

The Low Art Tile Company of Chelsea, Mass., have just shipped a handsome tile fountain to L. Hill, Jr., of Covington, Tenn.

C. W. Brown of Ipswich has a new clerk in the person of Harry Clegg of Franklin. He has the passport of first-class recommendations.

By a recent fire in Brown's Block at Rockland, H. Newman, druggist, suffered a loss of about \$2,000. He was insured for \$1,000.

Clark & Nutter, druggists, were burned out in a recent fire in the Watson, Dixon & Pray Building, at Somersworth, N. H. The loss was estimated at \$5,000.

Klein's drug store, at the corner of Tremont and Boylston streets, has been equipped with a long distance telephone. It is a great convenience to the customers and the public.

John Cosseboom of Franklin, formerly

a clerk in Mason's pharmacy, has gone to North Carolina for the benefit of his impaired health. He will stay there a year, perhaps longer.

F. Taft of Farwell's pharmacy, at East Cambridge, has been ill at his home on Thorndike street for some days, but is now convalescing. He will resume his duties in about two weeks.

A Chelsea drug clerk named A. C. Osborne was arraigned in court recently on a charge of embezzlement preferred by his employer, S. A. Epstein. He pleaded not guilty.

Thomas Brazell has bought the Pur-rington Block in Fitchburg, and has taken possession of the store. The drug business he will dispose of and then give his attention to his bottling business.

Adolph St. Jacques, formerly a drug clerk with Dr. J. C. Maranda, in Woonsocket, R. I., has opened a drug store in Harrisville, that State. He has taken as a partner Joseph Cadorette of Manville.

The drug store of George P. Hopkins, 154 Blue Hill avenue, Roxbury, was raided by the police last Sunday, and four men, including the proprietor, were arrested on a complaint for gambling.

J. J. Harbour of North Cambridge has been elected a member of the Newetowne Club, a swell organization of that part of the University City. All the druggists of that city with one exception are members of the club.

Milo Briggs of Salem, a salesman in the dry goods and fancy goods house of William G. Webber in that city, has accepted an engagement to go on the road for the C. R. Bailey Perfume Company of New York.

The H. K. Mulford Company of Philadelphia have established an Eastern depot for their preparations, with C. H. Goldthwaite & Co. of 186 Washington street, Boston. This step has been necessitated by the demands of their growing Eastern business.

Henry S. Mansfield of Salem has bought the elegant estate situated on Lafayette street, South Salem, known as the West property. It is understood that the price paid was \$18,000. It is one of the finest properties in the aristocratic quarter of the city.

While attending to some duties in the basement of Kelly's drug store, Pawtucket, R. I., one day recently, Albert Brownell, a clerk, was seriously injured by the bursting of a soda generator. One leg was broken and there are internal injuries. He lives in Providence.

A handsome drug store is that of Frank H. Willard, situated at 408 Cambridge street, East Cambridge. The interior has been finished in oils and elaborately frescoed. Mr. Willard is one of the solid men of the Third Ward, and has the entire confidence of the physicians.

A festival and bazaar to be held under the auspices of the New England Hahnemann Association was opened in the Boston University for Medicine this week. One of the chief purposes of this bazaar is to interest the public in the great work which the school is accomplishing. A series of scientific lectures and talks have already taken place, and more than usual interest has been manifested in the event. Pecuniarily, it will be a success.

## PENNSYLVANIA.

## FORGED ORDERS IN PHILADELPHIA.

PHILADELPHIA, April 4.—For some time past there have been a number of forged orders for drugs presented at the various wholesale houses in the city, but as the amounts lost have been small, little has been said on the subject. A few days ago one of these forged orders was presented at Smith, Kline & French Company's, and while the goods called for were cheap, yet it created some suspicion, and upon inquiry it was found that Mr. Cummings, whose name was signed to the order, had not ordered it, and an investigation was made and the perpetrator of the forgery was arrested. He is a young man 19 years of age and does not possess any special feature showing that he will be an adept at this business. He got two boys to present the order and then met them outside. While the case is still pending, it is more than likely that the firm will not press it this time, as the boy's father died about six weeks ago and his mother pleaded with Mr. Kline to be lenient with him and the matter is held in abeyance.

## W. LASCELLES-SCOTT VISITS PHILADELPHIA.

W. Lascelles-Scott, a well-known pharmacist of London, is paying a visit to this country to see what progress we have made in pharmacy. On March 30 he paid a visit to the Philadelphia College of Pharmacy and was very agreeably surprised with what he saw there. He speaks in a pleasant manner of things that are new to him in this country, and considers that the United States is keeping up with foreigners in all its professions. This is his first tour in the United States and he is taking the trip in a quiet way, as he expects to transact considerable business through it. He is 70 years of age and looks well and hearty.

## DEATH OF HENRY BOWER.

On March 26 Henry Bower, a prominent manufacturing chemist, died at his home, 180 South Twenty-third street. Mr. Bower was born in this city 63 years ago. He pursued the course of study at the Philadelphia College of Pharmacy, graduating in 1854. Following his graduation he entered business as a chemical broker, and later engaged in the manufacture of chemicals, his factory being located at Twenty-ninth street and Gray's Ferry Road. In 1886 he took his son, William H. Bowers, into partnership with him, the firm name being changed to Henry Bower & Son. The following year the firm was dissolved and two stock companies incorporated, the Ammonia Company of Philadelphia, of which Mr. Bower was general manager, and the Kaolin Chemical Company, of which he was secretary. Mr. Bower was considered an excellent authority on all subjects relating to the manufacture of chemicals, and in both 1880 and 1890 he was an agent of the Census Bureau for the collection of statistics of the chemical industry. Several years ago he received the Elliott Cresson Medal from the Franklin Institute for the process for the utilization of crude glycerine. The medal is of gold and is the most valuable one awarded by the Institute. Mr. Bower also prepared a number of articles on chemical subjects. He was an active member of the Franklin Institute and was one of the Board of Managers. He was also for a long time secre-

tary of the Manufacturing Chemists' Association of the United States. He was a lifelong Republican. He formerly belonged to a number of clubs, but at the time of his death had only retained his connection with the Rabbit Club.

## SELLING ADULTERATED PHENACETINE THROUGHOUT PENNSYLVANIA.

Sellers of cheap phenacetine are not confining themselves to this city alone and they are now canvassing many of the surrounding towns. Several days ago a young man canvassed the drug stores through Bethlehem and claimed to have phenacetine for sale at a reduced price. The young man who was selling what he said to be phenacetine, asked only 60 cents per ounce for it. The market price is \$1 per ounce. This reduction created some suspicion and an ounce was purchased by one of the druggists there out of curiosity and he made an analysis of it. The ounce that he bought contained just 108½ grs. of phenacetine and the balance of the 487½ grs., which makes an avoirdupois ounce, was acetanilid, the market price of this drug being about 38 cents per ounce. This salesman represented that he got the phenacetine in this country by way of Canada. It is probable that a number of druggists bought the adulterated drug, not only in Bethlehem, but in other cities as well.

## FILTERING SCHUYLKILL MUD.

At the last meeting of the Alumni Association of the Philadelphia College of Pharmacy, held on March 24, Prof. Alex. C. Abbott, Professor of Hygiene at the University of Pennsylvania, gave an interesting lecture on water filtration. This subject is claiming the attention of all the citizens of this city at the present time, owing to the filthy condition in which the drinking water now is. In his remarks Professor Abbott said that 24 years ago the subject of filtration was already out of the experimental stage and was in successful operation. Much misunderstanding seems to exist and opposition has very recently arisen from unlooked for quarters. It has been publicly stated that it is impossible to purify water by filtration. The best proof that filtration purifies water is the existence of pure water in springs which get their supply only after filtration. Water filtered through sand emerges biologically and chemically purified. Objection is urged against filtration on the ground that sedimentizing is the only way to purify water. Wherever experiments have been made in reservoirs, it has been proved that sedimentizing does not purify, as in no case, even after settling for nine days, does the water equal in purity the standard which the law requires for filtered water in Germany.

## PHILADELPHIA COLLEGE WILL CELEBRATE.

Great preparations are being made by the Philadelphia College of Pharmacy for the fitting celebration of the seventy-fifth anniversary of that college. The matter is in charge of the following: Howard B. French, Prof. J. P. Remington, M. N. Kline, Dr. A. W. Miller, Geo. M. Beringer and J. W. England, representing the Board of Trustees, and Wallace Proctor, Prof. Henry Trimble, W. N. Stem and W. L. Cliffe, Dr. J. L. D. Morrison and C. Carroll Meyer, representing the Alumni Association. The celebration is to take place on the evening of April 22, when a large banquet is to be held in the hall of the college. The dinner is

to begin promptly at 7 o'clock, and it is the intention of the committee to have many prominent citizens present. Governor Hastings is to be invited and numerous high city officials, as well as many of the prominent newspaper editors who have been asked to lend their presence.

Considerable interest is being taken in this celebration, as it is generally conceded that the Philadelphia College of Pharmacy occupies a very prominent position among the leading colleges. Everything has been done of late years to keep it in the lead, and it is the intention of the faculty to maintain the high standard it has reached. On the same night there is to be an exhibition in the library of the building of all the works that have emanated from the faculty and graduates of the college in any way. There are numerous volumes of its literature, and it will be a treat to have the same properly displayed. Howard B. French, the chairman of the committee, is working very hard to make this affair a success, and judging from the replies that he has lately received, it will no doubt be one of the crowning events of this well-known institution.

## ANNUAL MEETING OF THE PHILADELPHIA COLLEGE OF PHARMACY.

This meeting in April is the one of the quarterly series termed the annual meeting, because reports for the year on different subjects are presented and acted upon. It was held, by an adjournment on account of the death of Robert England, one of the trustees, on April 6. Vice-president Jenks occupied the chair. The minutes of the Board of Trustees showed full attendance at their meetings and their devotion to the interests of the college. The report of the Publication Committee was the best that has been made for some years. There have been published during the past year some 74 original articles by 36 authors, of whom 13 were members of the college. The financial part also showed a gratifying improvement. Professor Remington thought the editor and committee should be encouraged by the work that has been done, and was glad to see the time honored journal on a good basis.

The Museum Committee have added 50 per cent. more space to the collections, and still more will be required soon if the specimens continue to come in as they have been doing. They are classifying them so that they may be found readily. The librarian has received by donations some 2,000 volumes. Dr. Miller, from the Committee on Membership, handed to the meeting letters from the following gentlemen who had been elected honorary members of the college, in which they all express their gratification of the honor. They are Dr. Oscar Loew of Tokio, Japan; D. L. Simmons of London, and Fredk. Hoffman of Berlin. Professor Ryan offered a resolution approving and indorsing the bill now before Congress for the adoption of the metric system in the United States, which led to a little debate, as one member seemed to think it was a commercial matter only; but as the United States Pharmacopoeia has adopted the metric system, the resolution passed unanimously. An election for officers resulted in the re-election of all the present incumbents, and W. L. Cliffe, Ph.G., to the place on the Board of Trustees made vacant by the death of Robert England. Some minor routine business followed, and the meeting adjourned.



**Among the Trade.**

Lewis J. Meyers has fitted up and opened a new store at Twentieth and York streets.

T. A. Walker has opened a new store at Nineteenth and Ontario streets, which he has fitted up in an elaborate manner.

Dr. B. J. Murray, formerly druggist at Falls of Schuylkill, has opened a new store on Germantown avenue, near Mt. Airy.

A. L. Besore, Seventeenth and Tioga streets, has recently purchased a handsome soda fountain from Chas. Lippincott & Co.

George J. Pechin of Second and Pine streets, Camden, N. J., has made a number of alterations to his store and has bought a handsome new soda fountain.

Geo. A. Davis is building a new store and dwelling opposite his present store at Forty-ninth street and Woodland avenue, which he expects to have finished by June 1.

James P. Mallon, apothecary at the University of Pennsylvania Hospital for several years, has bought the store formerly conducted by D. J. Weidner at Jefferson street and Germantown avenue.

L. Hassell Lapp, the assignee for the Lapp Drug Company, who has been confined to his home for a number of weeks, is now convalescent, and it is expected he soon will be out and be able to make a statement of the affairs of the company.

Lewis S. Sorber has bought out the drug store at Nineteenth and Fitzwater streets. Mr. Sorber was formerly a clerk for J. T. White, at Franklin street and Columbia avenue. He is restocking his store with a fresh supply of drugs and sundry articles.

Davis C. Lyman, who was formerly in the drug business at Paris, Ky., and also for a number of years conducted a drug store at Sixth and Diamond streets, has allied himself with the house of Chas. Lippincott & Co. Mr. Lyman is well known throughout the trade, and his connection with this house is looked upon as a good move for both.

Schandein & Lind, manufacturers of Garwood perfumes, are now engaged on their new perfume, the *Peau d'Espagne*. This odor has only been on the market a short time, but is meeting with considerable success. Mr. Lind is now making a trip through the South, and while the orders he is receiving are not phenomenal they are very good considering the dullness of the trade.

Harry Vin Arny, who has been at the University at Göttingen, Germany, for the last four years, stopped over in Philadelphia on his way home to New Orleans. Mr. Arny is a graduate of the Philadelphia College of Pharmacy, class 1889. Shortly after graduation he went to Germany, where he has taken a four years' course of study at the above university, at which he took the degree of Ph.D.

C. E. Bierce is now representing the perfumery department of McKenzie Bros. & Hill in the States of Pennsylvania, Delaware, Maryland and West Virginia, with headquarters at 1020 Chestnut street, Philadelphia. The combined energies of Paul Engmann, who looks after their essential oil business in the same territory, and Mr. Bierce will no doubt succeed in making a very favorable showing from that section for their house.

**Death of Robert England.**

On Sunday, March 29, Robert England, one of the best known druggists in this city, died at his residence, 800 South Tenth street. Mr. England had been ill for about a week with bronchial pneumonia complicated with an affection of the heart. His funeral took place on April 1, the pallbearers being Wm. B. Thompson, Thomas S. Wiegand, Wm. J. Jenks, Dr. Charles A. Weidemann and H. N. Rittenhouse. Mr. England was born at Passyunk Road and South street, February 21, 1825. In early youth he was apprenticed to John Simes, druggist, at Eighteenth and Market streets. In 1845 he started in the drug business for himself at Tenth and Christian streets. He was there two years when he moved up one square to Tenth and Catharine streets, where he carried on business until the time of his death. He was graduated from the Philadelphia College of Pharmacy, March 16, 1846.



ROBERT ENGLAND.

In the palmy days of the volunteer fire companies Mr. England was an active member of the Moyamensing Hose Company, then an important factor in the social and political life of the community. During the Civil War he was an apothecary to the Volunteer Corps stationed in the lower part of the city. Later he was a member of the Board of Health. For many years he was president of the Third Sectional School Board. About 15 years ago he was nominated by the reform element in the ward for Select Council and received the endorsement of the Committee of One Hundred.

The Pharmaceutical Examining Board of the city of Philadelphia was created in 1872 and at the request of Mayor Stokley the Philadelphia College of Pharmacy submitted names of representative pharmacists for appointment on the Board. Mr. England's name was on this list, and he served as a member of the Board until it went out of existence in 1887, upon the passage of the law creating the State Examining Board. Mr. England was actively identified with a number of charitable and educational institutions. He was a member of St. Paul's Methodist Episcopal Church and

treasurer of its Board of Sustentation. He was treasurer of the Philadelphia Conference Tract Society, a manager of the Church Extension Society, a trustee of the Philadelphia College of Pharmacy, a trustee of the Philadelphia House of Industry, and a director of the Moyamensing Soup Society. He was a member of the American Legion of Honor, Philadelphia Lodge Odd Fellows; Meridian Sun Lodge, No. 158, F. and A. M.; Royal Arch Chapter and Corinthian Chasseur Commandry No. 53, K. T. His wife, two sons and four daughters survive him.

**Pittsburgh.**

PITTSBURGH, April 5.—The drug business in this city, from all reports, is in an excellent condition. These reports are verified to a large degree by the numerous improvements that are being made by the owners of drug houses, both wholesale and retail, in this city and in Allegheny. C. E. McClosky, doing business at the corner of Ohio and James streets, Allegheny, is making extensive improvements and alterations in his establishment.

**A NEW KIND OF SWINDLE.**

Walter H. Keyes, who styled himself president of the Mississippi Medicine Company, is a much wanted individual by the Allegheny police authorities. During the latter part of last week Keyes suddenly and mysteriously disappeared, and with him went about \$500 contributed by two persons who had unfortunately purchased a partnership in the doctor's pharmaceutical plant. On February 6 Dr. Keyes opened a drug store at 102 Ohio street, Allegheny. From whence he came no one seemed to know, for Keyes never told that. The belief is that he came either from Cleveland or Philadelphia. He advertised for partners with some ready cash to buy an interest in a good thing. Mrs. Mary Galloway of 53 Dithridge street and W. D. Schaffer of Economy, responded to the call. They put up \$250 each for a third interest. On March 23 they called at the above number to see how business was progressing. To use a common expression, it was out of sight. So was Keyes, and so was their money.

It developed that Keyes had closed up his drug store several days before, and had gone away without telling any one where he was going. The victims went before Magistrate McKelvey and swore out a warrant for his arrest on charges of larceny and obtaining money under false pretense. Keyes advertised his business as the Mississippi Medicine Company, Walter H. Keyes, president, with store and general offices at 58 West 125th street, between Fifth and Lenox avenues, New York City. His company claimed to be the most liberal firm on earth; their adv. read: "Free musical concert every day and evening. Lady clerks in attendance. Five hundred thousand dollars given away in 1895 and 1896. In order to introduce the greatest of all remedies, every purchaser of a bottle of these celebrated medicines will receive a valuable present. These consist of watches, clocks, diamonds, silverware, musical instruments, albums, vases, lamps, casters, pickle dishes, butter dishes, water and wine sets, dolls and 1,000 articles to select from. Take your choice. Laboratory, St. Louis, Mo."

Keyes, it is said, operated the same game in Butler. The police of Allegheny think they have a clever man to deal with.

## News and Notes.

E. Holden & Son, the well-known druggists at the corner of Federal and Lacock streets, Allegheny, have, during the past couple of weeks, been making extensive interior and exterior improvements.

Norton McGiffin Smith, a well-known resident of Washington, Pa., died at his home in that place last week, of consumption. Mr. Smith was in the thirty-fifth year of his age. He was the son of Ed. R. Smith, ex-sheriff of Washington county, and was for several years engaged in the drug business.

Joseph Stybr, the well-known Allegheny druggist, has been granted a building permit by the Allegheny building inspector, for the construction of a handsome new three-story brick dwelling to be erected on Liberty avenue, Fourth Ward. The building will have all modern improvements. Ground has already been broken for the foundation.

D. C. Yellig, doing business at the corner of Grant and Western avenues, is another Allegheny druggist who has been making some extensive improvements in his store this spring. The old soda water fountain has been removed and replaced by a handsome and costly new one. The fountain is said to be of the very latest design and one of the prettiest in the two cities.

A. F. Sawhill, the old and well-known Allegheny druggist, who for years was located on Federal street, near Montgomery avenue, has moved into his new store in the Mutual Building, on Ohio street, between Arch and West Diamond streets. Mr. Sawhill left all of his old fixtures behind, taking into his new establishment an entire new outfit. When fixed up, Mr. Sawhill declares that his will be one of the handsomest drug stores in Western Pennsylvania.

The annual commencement of the Pittsburgh College of Pharmacy will be held at Carnegie Hall, Allegheny, April 17. The members of the senior class, who have passed the final examination successfully, and who have the required experience in actual practice, will then receive their degrees.

The names of the successful students are: W. J. McAdams, Charles H. Schaefer, W. S. Vance, E. A. Rankin, Edward H. McMillan, F. R. Graham, F. G. Gable, W. F. Heidenreich, H. A. Steele, F. K. Deffin, J. D. P. Speer, C. M. Kelly, J. C. McMillin, V. A. Sandles, A. E. Soffel, P. A. Hellerbach, R. W. Henderson, C. M. Coleman, D. R. Lutz, W. S. Erskine and J. A. Faessel.

W. J. McAdams carried off first honor and Charles H. Schaefer second honor. Esther C. Hamilton will receive a certificate of proficiency in chemistry, and materia medica.

Prof. J. A. Koch, dean of the faculty of the Pittsburgh College of Pharmacy, sailed for Germany on March 23 with the expectation of spending some time at Munich, where he will further prosecute his studies in advanced pharmaceutical chemistry. Professor Koch was accompanied by his family. After the steamer sailed news was received in New York of the sudden death of his father, Arnold Koch, who was one of the best known druggists of the South Side of Pittsburgh, having been established in business there since 1860. Previous to this date he was connected with Julius Zeller in New York, the uncle and predecessor

of Max Zeller, the well known wholesaler of this city. The deceased was uncle to F. W. Koch of Boehringer & Soehne.

## OHIO.

CINCINNATI, OHIO, April 4.—During the past few days there has been a great deal of talk here about an alleged counterfeit of Munyon's Homeopathic Remedies which is said to be in the local market. A representative of the Munyon Company was here the other day and stated to several parties that he had found considerable of the spurious goods in a local house. The difference between the genuine goods and the counterfeit article is that the tin cap on the bottles of the first named have the name of the company on them and the others have not. The alleged spurious goods found here were taken up and replaced by an agent of the company named. The counterfeit goods got into the West through a New York house, which bought \$4000 worth of the stuff from a party who said he got them in payment for a big advertising contract. It is said that the New York parties were caught by the liberal discount allowed them by the man in question. The value of the alleged spurious goods found here will not exceed \$400.

## ANOTHER SWINDLER.

A clever swindler has been operating among the druggists of this city and has so far managed to escape arrest. A few days ago he called at Weatherhead's drug store and took up some Hermann's snuff, which he said he would replace with fresh goods. He went to John D. Park & Sons Company's place and practiced the same trick. A half dozen other druggists suffered in a like manner. The fellow claimed to represent L. T. Hermann & Co. of Wilmington, Del., but a message to that firm brought back the answer that he is a fraud and has practiced the same trick in Pittsburgh and other cities. The matter was reported to the local police, but the swindler got out of the city without being detected. He is described as weighing about 800 pounds and being about 5 feet tall. He has a smooth, round face and dark hair.

## THE COLLEGE COMMENCEMENT.

Preparations for the annual commencement exercises of the Cincinnati College of Pharmacy were completed on the 2d inst. The affair will be held at the Scottish Rite Cathedral, on the 15th inst. Following the commencement exercises there will be a banquet and dance. Among the speakers who have thus far been selected are Senator-elect Joseph B. Foraker, Mayor John A. Caldwell, Hon. Louis O'Shaughnessy, and Frank Freericks, president of the alumni association of the college.

## SENATOR ABBOTT WANTS A NEW TRIAL.

The motion of ex-Senator Abbott for a new trial was argued before Judge Pugh, in Columbus, on the 1st inst. Readers of this journal will remember that Abbott, who is the author of the present Ohio Pharmacy law, was convicted in Columbus a short time ago of soliciting a bribe of \$200 from one Elmore Black, at that time a druggist of Columbus. After the verdict was rendered Abbott was released on a bail bond and his attorney made a motion for a rehearing of the case, on the ground that several of the jurors slept during the trial.

The affidavits of Court Bailiff Dan. Chestnut and Ferd. Basterdes, one of the jurors in the case, were submitted in behalf of the State to refute the above claim. The matter was submitted to the court and briefs will be presented.

## A SUCCESSFUL ADVERTISEMENT.

The Stein Vogeler Drug Company established a new precedent in advertising one day recently. In advertising the famous "Educator" cigars they expended over \$400 for a brass band, six white horses, and the band wagon which was used for some years by the John Robinson circus. In this way Cincinnati, Covington and Newport were paraded and 140,000 cigars—the largest delivery ever made in this section of the country—were delivered to dealers. A number of bicycle stables were placed with dealers and they were placed in front of cigar stores and other places where the cigars are on sale. These signs cost about \$4 a piece, and as upward of 800 of these were distributed, the cost can readily be seen. As a result of the trip Messrs. Vogeler, Budde and others are now wearing flannel around their necks. They all caught cold from yelling to boys to desist from climbing into the band wagon.

## News About Town.

George Kylius was in Hamilton on the 2d inst.

Harry Streithorst was recently elected an officer of the Buckeye Club.

George Kylius has sent in his order for a season book to the base ball park.

Robert Effinger, the druggist who has had so much domestic trouble, is not in the city.

Harry Streithorst and Ed. Voss rode side by side in the St. Patrick's Day parade.

Karl Kuhlmann, the well-known druggist, will soon receive his "sheep skin" as a physician.

Spring trade is reported on the boom by the Lewis Voight Wall Paper Company of this city.

Ed. Voss, the druggist at Twelfth and Vine streets, has purchased a bicycle to reduce his weight.

Louis Sauer will attend the Republican convention at St. Louis. He is an ardent admirer of Major McKinley.

The outcome of the investigation of the Dairy and Food Commission is the leading local theme. Particulars are given on another page.

Mrs. Marie Boehmer, mother of Al. Boehmer, the clever druggist at Eighth street and Central avenue, died here the other day. She was a most estimable person, and a host of friends mourn her death.

## Cleveland.

CLEVELAND, April 4.—A representative of the AMERICAN DRUGGIST called on S. S. West of the firm of Bruce & West, manufacturers of flavoring extracts in Cleveland, regarding his experience with the Ohio Dairy and Food Commission. Mr. West having testified before the Legislative Committee at Columbus last week. Mr. West said that, in the first place, he had written to Dr. F. B. McNeal, the commissioner, asking whether his firm would be likely to be prosecuted for selling a low grade ammonia, to which Dr. McNeal replied in writing that "ammonia was not a food,

should not be considered a drug, and could not be called a drink," and therefore could in no way cause prosecution. Bruce & West commenced the manufacture of the low grade ammonia, and not long afterward a country customer of a jobber to whom they had sold was "hauled up" for selling it. This dealer was informed, immediately after his arrest, the exact amount of his fine and costs, and notified that if he paid them his case would be "nolled." But he declined to "fork over," invoked the protection of the jobber, who in turn called upon the manufacturers, and the case, after being decided against the defendant before a Justice of the Peace, was carried into the Common Pleas Court, where it has not yet been tried.

Mr. West, as well as the majority of the druggists and grocers in Cleveland who have been seen by the DRUGGIST representative, are of the opinion that the prosecutions are made, at least, upon very insufficient grounds, and there are not a few who openly state that the whole list of arrests and fines have been brought "for revenue only." The outcome of the investigation at Columbus is anxiously awaited in this city, and there is an earnest hope that something will be done to stop the wholesale arrests and prosecutions, or persecutions, which have served to keep reputable dealers in a state of panic for the last two years.

#### SUICIDE OF PHILIP MERGENTHALER.

Philip Mergenthaler, a respected and influential citizen of Massillon, Ohio, who had for many years been engaged in the drug business, committed suicide at his home in that city on March 24. The shock to his family and friends was a severe one, and his wife, who was utterly prostrated, may not recover, as she is still very ill. Mr. Mergenthaler had been very melancholy and had acted strangely for several months. His trade during this time fell off greatly, until, a few weeks ago, he disposed of his drug store. After so doing he worried continually. On the morning of March 24 he left his home, ostensibly to visit a neighbor. His wife, suspecting from his actions that all was not right, followed him about twenty minutes later, and was horrified, on passing the barn, to find her husband's dead body hanging by a halter from a beam. He had been dead some minutes when cut down. Mr. Mergenthaler left a considerable amount of valuable property in and about Massillon. The coroner's jury found no motive for the suicide other than insanity.

#### Cleveland Notes.

Grover Cleveland Healy has been in the city lately in the interests of Johnson & Johnson, booming their goods with the Red Cross brand.

Arthur B. Calkins, for many years with the late Henry C. Gaylord, has accepted a position with F. A. Brooks & Co. of 1135 Detroit street.

A. H. George, proprietor of the American House Pharmacy, at 128 Superior street, will remove April 15 to 115 Superior street, opposite the Weddell House.

George Schamba, formerly of Case & Schamba, one of the best known pharmacists in Cleveland, is now located with Julius W. Deutsch at the Opera House Pharmacy.

The cards are not yet out, but the com-

ing marriage of Henry Miller, the genial proprietor of the Gem Pharmacy, to Miss Minnie Carroll, on June 11, has been informally announced.

Henry F. Toedtman, owner of the pharmacy at 1942 Superior street, has opened a branch store at 117 Wade Park avenue, which will be in charge of his brother, Frederick C. Toedtman.

The boys here are all anxiously looking forward to the coming meeting at Put-in-Bay, and are counting on a big time on "Cleveland Day." No definite arrangements as to time, etc., have been made yet, but no stone will be left unturned to make both the gathering and the day a rousing success.

#### Northern Ohio.

McCorkle Brothers will succeed Dr. D. Strickland in the drug business at Niles.

George Schade of Sandusky has recently sold out his drug business to Charles L. Osburg.

Mr. Brenner, recently of Gans & Brenner, at Youngstown, has purchased a new stock and is opening up a store of his own in that city.

Frank Floding, until recently with D. Mellinger, at Leetonia, has purchased the Steel Plant Pharmacy, at Lorain, from Dr. O. A. Rhoades, and will operate it under the name of F. Floding & Co.

B. C. Ely of Conneaut has purchased the stock of R. B. Swift at Kingsville, and will operate the Kingsville store as a branch of the Conneaut establishment. Mr. Swift is now traveling for Benton, Myers & Co. of Cleveland.

#### John W. Burrow.

John W. Burrow, one of the oldest and best known pharmacists in Norfolk,



Va., died at his residence in that city March 23, aged 60 years. He commenced his business career in Norfolk in 1856, and succeeded in building up a large and remunerative business. He was married in early life to Miss Devereaux of Richmond, Va., who survives him. He leaves three sons, Devereux, the eldest, Alan G., and Trigant, the youngest. The business will be conducted as heretofore.

## MICHIGAN.

A new drug store is being started at Lake Linden, by J. M. P. Pichette.

Millman & Miller have succeeded Wm. Millman in the drug trade at Rockwood.

Arthur Green of Devil's Lake has purchased the store of J. W. McGee in that place.

L. E. Warner of Kingston has disposed of his drug store to Frank English of Sanilac Center.

The death of John B. Alward of C. B. Alward & Co., druggists and grocers at Camden, occurred recently.

Wm. Seig, late a clerk in a well known Detroit drug store, is looking for a good location for a new store in the State.

The drug store of Frank E. Jones of Flint, Mich., was burglarized recently, and about \$20 worth of cigars taken.

Ed. L. Frazier of Muskegon was assessed fines and costs amounting to \$13 for retailing drugs without being registered.

John A. Downer, an Olivet druggist, was recently married to Miss Gertrude Mead, daughter of Charles H. Mead, mayor of that city.

Thomas Dugan of Davison has disposed of his drug store, and after a short rest will go to the Cripple Creek gold region on a prospecting tour.

The firm of Tinholt & Abbott, at Muskegon, have been dissolved. The former partners, J. A. Tinholt and R. A. Abbott, are running separate establishments.

Doak & Orrison have come into possession of the drug store of Castor, Bement & Co., at Springport, by the chattel mortgage route, and will continue the business themselves.

Conrad Clippert, a capitalist of Delray, one of Detroit's suburbs, will build a drug store and doctor's office on the corner of Dearborn street and River Road, in that village.

E. J. Robinson, druggist at 181 East Milwaukee avenue, Detroit, has been obliged to take a prolonged vacation on account of ill health, and is now so far recovered as to be able to resume his place.

Merritt & McClintic and H. A. Blackmar of Charlotte, Mich., have supplied their respective drug stores with a fine outfit of fine square oak showcases, which greatly add to the handsome appearance of the stores.

Frank H. Hartman, late of Oxford, has gone to Muskegon and assumed a position as pharmacist in the West End Drug Store, owned by Fred. Brundage. A. W. Stevenson, who has been manager of that concern, has gone to Mr. Brundage's main store.

Dr. J. W. Summers of Gold City has gone to Munising, in the same State, and contracted for the erection of a drug store building 26 x 60 feet in dimensions. It will be covered, inside and outside, with sheet steel, and will be known as the Palace Drug Store.

The appointment of A. S. Parker, one of Detroit's foremost druggists, to the position of Park and Boulevard Commis-

stoner has been confirmed by the city council. Mr. Parker is a native of Kalamazoo County, Mich., and has lived in Detroit ever since his graduation at the Michigan University, in 1879. He has always taken an active part in the fight for municipal reform, and is a warm adherent of Mayor Pingree.

## ILLINOIS.

CHICAGO, April 8.—Liebig, in his charming "Chemical Letters," tells of the learned dispute of ancient days, as to the important question whether angels have wings or not. At the end of the twentieth century scientists very likely will laugh at our quarrels about Pharmacy Degrees as an "Angel Wing War," and we have not reached the climax yet. The other day the news flashed over the country that the Masonic University had purchased the famous Morrow Farm, and was now to be an established fact. What a tempting opportunity for the Colleges of Pharmacy looking around for a university appendix. The graduate of the Masonic school has the possibility of 88 degrees in prospect—with fancy attachments *a la* Rochester Consistory Hydrophobia Lodge No. 19. If such a graduate opens up a bicycle raffle, as some of our Chicago pharmacists do now, the success must be phenomenal, for no other degree is so sure of world-wide support.

The raffle is the latest, and as we are trying to regulate everything by law, it seems a pity that the Pharmacy Lottery clause was omitted in our latest improved edition of the Pharmacy act. Our latest Improved act was to be a genuine cure-all. So far it has hurt nobody—except the pharmacist whom it was to benefit—and that is about the fate of every move we make with a view to better our condition. In days gone by we knew nothing of the troubles and tribulations of the soda fountain. We adopted the innovation to "hold trade," and to-day the majority of pharmacists who have assigned or are blessed with a "receiver" or groaning under the "still" alarm of a mortgage owe their bondage to their extravagance in hopes—and surplus of disappointment of the soda fountain.

In days gone by we knew no telephone; we adopted the new era to hold trade; and after holding trade that way for 15 years, there is so little of it left that the druggists now are almost compelled to throw the 'phone out or adopt the Force-Pay-Automatic Machine, simply because there are not many druggists among us who can afford to pay \$200 for a machine that affords the public a chance to patronize cut-rate department stores without going down town. For 20 or more years associations and societies have been exerting themselves to raise the standard, until we raised it so high that we feel the end of the rope that raised us took us off our feet. But let us hope—while there is life left. The process of liquidation once began, the process of weeding out will and must make things more endurable; and if the laws of the future will accomplish one thing only—will assure a better class of aspirants for our profession than the present process of promotion from soda jerker to Ph.D. affords—the law will do wonders. At present the law pinches more than it relieves; by-and-by lawmakers and law administrators will learn the lesson of the day—that the stone of the wise has not been discovered yet—that no gold can be

made out of graphite. And the future law will secure not quality of pharmacists only, but count the numbers of pharmacists and secure quality of drugs and chemicals. Overcrowded ranks of pharmacists are a danger to health and comfort of our citizens, and as clearly a nuisance as too many saloons.

Our early pharmacists, with the same hope of holding trade, made out of themselves advertising mediums of patent medicines, peddlers of quack nostrum almanacs. They held trade so successfully that patent medicine trade has gone to department stores, and to-day the public don't even care for the almanac any longer—since the insurance companies, banks, newspapers, etc., furnish much handsomer calendars—and the public gives the druggists the traditional kick.

## Affairs in Chicago.

J. Whitall Nicholson of Whitall, Tatum & Co. was here last week for a few days.

Felix A. Miller will open a new drug store about April 15 at the corner of Melrose and Evanston avenues.

Messrs. Gale & Blocki will remove early in April from their present store on Randolph street to the Venetian Building, Washington street.

At the meeting of the trustees of the Chicago College of Pharmacy on March 24, the following officers were elected: Paul J. Behrens, vice president; W. F. Dunham, secretary; Andrew C. Scherer, treasurer.

Mrs. Gervaise Graham recently returned from her Southern trip and is making arrangements for new premises for the manufacture of her line of toilet specialties.

Thomas Whitfield, druggist, at the corner of Jackson street and Wabash avenue, was married on the 18th inst. at Pasadena, Cal. This is Mr. Whitfield's third marriage.

The graduating exercises of the Chicago College of Pharmacy will be held at the Schiller Theatre on Thursday, April 28, at 2.30 p.m. The Alumni Association of the college will give a reception at 8 o'clock at the Columbus Club.

The Hobbs Medicine Company's business has been succeeded to by the Hobbs Remedy Company of Chicago. The line of advertising that was done by the old company was very large, but the managers of the new company will increase it considerably.

The question of consolidating the Chicago School of Pharmacy with the University of Illinois is again under consideration. A. E. Ebert and Henry Biroth, connected with the Chicago school, were in the city to-day conferring with President Draper. It is understood that the matter will be taken up at the next meeting of the university trustees.

A. C. Musselwhite will remove his drug store at the southwest corner of Dearborn and Van Buren streets to the southeast corner of the same streets about May 1. The new store, which is in the Old Colony Building, will be the equal, if not the superior, in the quality of fixtures to any in the country, as the lease contains a clause to the effect that the design of the fixtures, even to the bottles, must be approved by the owners of the building.

## MISSOURI.

St. Louis, April 2.—Examinations at the St. Louis College of Pharmacy are now at their height, commencing March 24 and the last being held April 7. About 70 seniors are in the race for diplomas. The commencement exercises will be held at the Germania Theater on April 16. Two banquets will be held that evening, one by the graduates, the other by the "failures,"—should there be any—and those who have not clerked enough to be granted diplomas, it being the rule of the college not to grant diplomas to any one unless they have clerked three and one-half years in a retail drug store. About 15 seniors will be excluded under this ruling, and they have decided to have a little celebrating of their own.

## CLASS OF '75 HOLD THEIR ANNUAL BANQUET.

March 22 was the twenty-first anniversary of the class of 1875 of the St. Louis College of Pharmacy, and a banquet was held in honor of the occasion. Only six members could be present. Wm. C. Bohn was chosen president for the ensuing year, and J. E. Koch, secretary. The other members present were Prof. Francis Nemm, Chas. Gietner, Chas. Lips and John G. Goehring.

## A SUCCESSFUL PHARMACEUTICAL DISPLAY.

The display in the pharmaceutical laboratory of the St. Louis College of Pharmacy on March 28 was all that had been anticipated. The members of the Missouri Board of Pharmacy were present and had a few words to say. A large number of physicians dropped in during the evening; and the Alumni Association was well represented. The year's work of the students was on exhibition. The junior class exhibited National Formulary preparations as their principal feature; while the senior class took up the United States Pharmacopoeia preparations. The prescription class also had a very attractive exhibit.

## GETTING READY FOR THE ASSOCIATION MEETING IN JUNE.

The members of the Missouri Pharmaceutical Association are hustling around getting ready for a lively meeting at Excelsior Springs in June.

## A STRICTLY PRESCRIPTION PHARMACY.

There is at least one strictly prescription pharmacy in St. Louis. This was recently opened by Emiel Kuenster, near the corner of Fourteenth and Olive streets. Mr. Kuenster has wrestled with all the phases of the retail drug business, and come to the conclusion that there is no money to be made in patent medicines, druggists' sundries, soaps, etc. He recently sold his drug store in the West End and now has a desirable location and is well equipped for prescription work. He was one of the staunchest members of the Apothecaries' Society, but says it is a thing of the past.

## Town Talk.

Paul Wright has changed from Wm. Cramer's store on Grand avenue to H. F. Bade's of East St. Louis.

The Alumni Association of the St. Louis College of Pharmacy will give a Kermis in June, for members only.

The St. Louis Drug Clerks' Society will begin their summer's work with a moonlight boat excursion early in June.



G. L. Blum, Ph.G., has purchased the drug store at Thirtieth and Olive streets, formerly owned by Theo. A. Klipstein.

Geo. Ude, one of the oldest pharmacists in St. Louis, is very low with inflammatory rheumatism. His recovery is doubtful.

Herman J. Ellerlage, formerly clerk for Gustave Koch, Twentieth street and St. Louis avenue, has left for Cripple Creek.

It is reported that a prescription pharmacy will soon make its appearance in the Union Trust Building, at Seventh and Olive streets.

F. D'Amour, an old-time St. Louis druggist, but now running a drug store in Denver, Colo., was in the city visiting friends recently.

C. A. Jamison has changed from the F. C. Meyer Drug Company on Park avenue to the Antimonopoly Drug Store, Sixth and Franklin avenue.

W. C. Harryman, Ph.G., has resigned his position at the Antimonopoly Drug

### North Dakota Board of Pharmacy.

The board examined a class of ten at their meeting, held at Fargo, March 8-4. The following passed as registered pharmacists: Geo. W. Walstrom, Lisbon; A. A. Brothen, Grand Forks; N. C. Nelson, licentiate of Minnesota, was granted registration without examination.

### A Large Manufactory.

The accompanying engraving shows the new home lately purchased and now occupied by E. N. Rowell Company, Batavia, N. Y., exclusive manufacturers of pill and powder boxes, labels and general printing for the drug trade.

This company previous to 1890 did nothing but a strictly jobbing business, procuring their whole outfit from other manufacturers. At this period, through increasing demands, they were driven to the manufacture of their own goods, and to-day they are not only furnishing goods to the retail trade, but are supplying many of the best jobbers throughout the

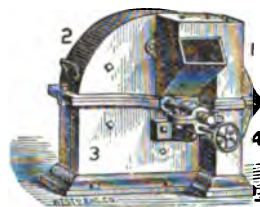
midway between Rochester and Buffalo, on the main line of the New York Central Railroad. It is a center of manufacturing interests, second to no other of its size, a fact due to its excellent shipping facilities, the town being located on the main line of the New York Central and branches, also the Lehigh Valley and Erie railroads.

### The "Candidate" Outfit.

The Valhalla Mfg. Company are offering a gallon of Wild Cherry Phosphate free for the purpose of giving the retail druggist an opportunity to give away samples at his store. The quantity is enough to reach 2,000 people. This offer is made to purchasers of "The Candidate" outfit, which contains one gross of 4-ounce and one gross of 8-ounce bottles. At the price that these goods are offered, viz., \$25, they will yield a profit of 125 per cent. For particulars of their other offers on smaller packages, see their advertisement on another page of this issue.

### Drug Mills.

The Mead Disintegrator is almost a necessity in grinding some classes of drugs, particularly such as are resinous or gummy. The indorsement of it by such firms as Parke, Davis & Co. of Detroit, and Henry Thayer & Co, Cambridgeport, Mass, is sufficient to prove that the mill is admirably adapted for



the purpose of the drug trade, and it is claimed that this mill, which is illustrated here-with, is very economical both as regards the amount of power required to operate it, and as to the small quantity of the drug which is not ground to the required state of fineness, and is, in some mills, lost as dust. An interesting catalogue of these disintegrators can be obtained free by writing to Mead & Co., Twentieth street and M. C. R. R., Detroit.



NEW FACTORY BUILDING OF E. N. ROWELL COMPANY, AT BATAVIA, N. Y.

Store, Ninth street and Franklin avenue, and is now doing relief work.

A runaway horse dashed through the big plate glass front of the Clinton Pharmacy a few days ago. The window display was demoralized, to say the least.

Wm. Semsrodt, Ph.G., for many years with G. Gieren, Twelfth street and Choctau avenue, is now serving the East India Mfg. Company in the capacity of pharmaceutical chemist.

A. J. Althoff, an old time St. Louis boy, has returned from Memphis, where he has been clerking for some time, and is now night clerk at S. L. Pickett's drug store, Jefferson avenue and Chestnut street.

### Georgia Board.

The Georgia Board of Pharmacy met in Atlanta in the Capitol, March 24. The full board was present, S. C. Durban, chairman; George F. Payne, Harry Sharp, John P. Turner and Henry B. Slack, secretary. Sixteen candidates came up for examination, and the following passed: W. H. Butler, Montezuma; J. N. King, Rochelle; W. O. Bray, Adairsville; J. R. Jackson, Social Circle; E. B. Jelks, Quitman; Henry A. Dunwoody, Atlanta; J. W. Meek, Black Hawk, Miss.; H. H. Sternbridge, Milledgeville, and Dr. F. L. Lewis, Camilla. The board adjourned to meet in Atlanta, May 4, the day before the Georgia Pharmaceutical Association assembles.

United States and Canada, many of their goods reaching South America.

The building is new, costing upward of \$60,000, and is situated in the heart of the city. It measures 50 x 200 feet inside measurement and is three stories in height, thus having a floor capacity of 30,000 square feet. It is equipped with all the latest labor saving machinery and devices, such as power elevators, time clock recorder, American watchman's time detector, non-corrosive dry pipe automatic appliances, fire escapes, etc., making one of the finest factory plants in Western New York.

The engine house is a separate building, as shown in the cut, and contains a 65 horse-power Corliss engine, dynamo for lighting the plant and pumps for forcing hot and cold water throughout the building, also a boiler and engine for forcing hot or cold air throughout the buildings.

Batavia should be proud of a plant of this kind, there being, in fact, but four concerns in the United States who themselves manufacture the whole line made by Messrs. Rowell & Co.

The firm to-day is far behind in filling their orders, more especially for their Nos. 20, 24 and 28 "Bronze," which are becoming world wide, and yet their present capacity for these three sizes alone is upward of 1,000 gross per day, which will be doubled in a short time, when they expect to be able to fill all orders promptly.

Batavia is a pretty little town of from 10,000 to 12,000 inhabitants, situated

### Review of the Wholesale Market.

NEW YORK, April 9, 1896.

It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.

There has been a rather better demand for nearly all lines of drugs, dyestuffs and chemicals during the past fortnight. Jobbing orders have been numerous and the demand for quantity lots has been greater than for some time past. Notwithstanding the better tone which prevails in business circles buyers yet display a good deal of conservatism in purchasing, and the aggregate volume shows no increase over corresponding periods of previous years. The tendency of values is in most instances toward a higher level, with the advantage, of course, in seller's favor.

**ADVANCED.**  
Dragon's blood,  
Senna leaves,  
Salicylic acid,  
Oil sassafras,  
Oil cajuput,  
Gentian root,  
Gum arabic.

**DECLINED.**  
Menthol,  
Bismuth subnitrate,  
Bismuth subcarbonate,  
Colocynth apple,  
Camphor gum,  
Balsam tolu.



## DRUGS.

*Alcohol* continues in fair jobbing demand without, however, any special variation in price. Rumors of shading by independent producers have been numerous, but lacking in foundation, and values appear to be well sustained at the quoted range of, say, \$2.33 to \$2.35, according to quantity.

*Balsam Copaiba* continues in demand, but few large sales are reported. The range of the market is 31c. to 32c. for Central American.

*Balsam Peru* is less firm, though prices are nominally unchanged; \$2.10 is the highest outside price quoted.

*Balsam Tolu* is in better supply and slightly easier with 45c. to 50c. now quoted.

*Barks*.—*Cascara Sagrada* continues to offer at 4c. to 5c. and numerous small jobbing sales are reported at this range. *Sassafras* is steady at 7c. to 10c. and Soap, 3½c. to 3¾c.

*Buchu Leaves* are quiet and generally quoted 12c. to 16c. and 20c. to 22c. for short and long respectively.

*Cassia Buds* are offered with more freedom, and we hear of some sales at a fraction below our quotations, or say 17c. to 17½c.

*Chamomile Flowers* remain quiet, although holders do not appear anxious to urge the distribution by making concessions from recently quoted values. German quoted at 14c. to 16c., Roman 12c. to 15c. and Belgian 10c. to 12½c.

*Cod Liver Oils* maintained firmly at the advance quoted in our last, or say \$64 to \$65 for best brands. Inferior Oil offers down to \$60.

*Colocynth Apples* are rather neglected at the moment and values have declined, with Trieste offering at 60c. and Spanish at 25c. to 30c., according to quality.

*Cubeb Berries* do not vary materially either as regards price or demand and our quotations will yet buy.

*Coca Leaves* have declined a trifle in the interval and Truxillo is now quoted 20c. to 22c. and Huanuco 27½c. to 30c. The stock in this market has been swelled by recent arrivals.

*Dragon's Blood* is in better position, with lump quoted at an advance of 2c., or say 22c. to 24c.

*Ergot* continues inactive, but holders are not urging sales below 15c. to 20c. for German and 19c. to 22c. for Spanish.

*Juniper Berries* are in demand and the market is well sustained at the range of 1½c. to 1¾c., as to quantity, with numerous sales reported at the inside figure.

*Menthol* continues weak and inactive, with \$4.10 the common quotation for spot goods and \$4 offered to arrive.

*Morphine* develops no action of consequence either as regards price or demand, and orders are being filled at the old line of prices, on the basis of \$1.50 to \$1.60 for bulk.

*Opium* is without improvement. The demand from jobbing quarters is extremely limited and spiritless. Sales of single cases have been made at \$1.95, though \$2 is quoted by most holders. Sales of broken packages at the higher figure were numerous, though \$2.05 represents the popular quotation. Powdered Opium remains steady at \$2.65 to \$2.75.

*Quinine* orders are running very light,

and the market is without change in any particular. Prices for outside lots of foreign stand at 26c. to 27c., according to brand and quantity. Manufacturers' quotations remain at 30c. for P. & W., and 28c. for other brands.

*Senna*, Alexandria, is developing a marked upward tendency, under the influence of enhanced cost in the foreign markets, though prices here are as yet quotably unchanged. Siftings have advanced to 8c. to 9c. In Tinnivelly there is no change.

*Vanilla Beans*, Mexican, are hardening in value, but last sales were made at \$6 to \$12 for common to finest quality, and we quote the range at these figures. In other varieties there is little change to note. Bourbon are bringing about \$5 to \$6, and Tahiti \$2 to \$2.25.

*Wax*, Carnauba, is somewhat scarce, and values are hardening. Sales of No. 3 are reported at 21c., while No. 2 and No. 1 have sold at 22c. to 28c. and 25c. respectively.

## DYE STUFFS.

*Aniline Salt* is held and selling fairly for consumptive purposes at about 12c.

*Divi Divi* remains unsettled in price, with \$80 apparently all that can be realized for round lots, and buyers extremely indifferent.

*Sumac* continues in moderate demand, and prices are held firmly at \$46.50 to \$47.50 for Sicily, and \$37.50 for Virginia.

*Gambier* continues active with large sales of steamer stock reported at 4c. to 4.05c.

## CHEMICALS.

*Arsenic*, white, remains in strong position, with 7c. generally quoted for English on the spot, and 6½c. named as inside rate for any variety from store or to arrive.

*Brimstone* has advanced in the foreign market to the equivalent of about \$15.75 for unmixed seconds, and \$15.50 for thirds landed at this port.

*Chlorate Potash* is well maintained at the range of 9¼c. to 9½c. for spot stock.

*Cream Tartar* upon spot is a trifle irregular, some outside holders shading manufacturers' prices in instances, but not to an extent to affect the market which is fairly steady at 26c. to 26¼c. for crystals and powdered.

*Nitrate Soda* is held at \$1.70 to \$1.72½ on spot as to quantity, with only a limited demand experienced.

*Quicksilver* is slightly firmer. Recent offerings at 50c. have been taken up or withdrawn and 51c. to 52c. is now quoted.

*Tartaric Acid* remains quiet. Purchases can be made at 30c. to 33¼c. and 33½c. to 33¾c. for crystals and powdered, and these figures represent the range from manufacturers.

## ESSENTIAL OILS.

*Anise*, which declined to \$2.50 soon after the publication of our last report, has hardened a trifle since, though values are quotably unchanged and \$2.50 to \$2.60 will yet buy. The present cost to import from London is about \$2.50 to \$2.60.

*Bergamot* is firmer, with little or no 1895 test offered for less than \$3, and up to \$2.80 quoted for 1896 test.

*Cassia* is irregular and unsettled, with considerable complaint experienced as to

the quality of the supplies now offering. The range of prices varies from \$1.75 for 40 test up to \$2.10 for 70 test.

*Citronella* is not taken with any freedom in round lots, and values are momentarily unsettled. The popular quotation is about 45c. for drums, though 42c. will buy in instances; tins quoted 45c.

*Cajeput* is in demand and higher, with 50c. now the popular quotation.

*Camphor* has advanced materially in the interval and 15c. is now generally asked for cans.

*Clove* continues very quiet; the quotations remain 45c. to 47½c. for buds and 40c. for stem.

*Cubeb* is in moderate demand with sales at 95c. to \$1.

*Peppermint* is passing out in moderate jobbing quantities on a basis of \$1.70 to \$1.75 for Western and State and \$1.85 to \$1.90 in tins; cases are quoted \$2.15 to \$2.20.

*Sassafras* has developed a sharp upward movement in sympathy with the higher cost of artificial, and it is doubtful if any could be procured below 38c. Artificial is quoted 29c. and Safrol up to 35c.

*Wintergreen* is weak and irregular, with pure oil offering at \$1.20 and artificial at 60c., though generally quoted \$1.25 and \$1.30 for pure and 65c. to 70c. for artificial. The advance in artificial is understood to be due to the enhanced cost of Salicylic Acid.

## GUMS.

*Arabics* are higher in the foreign market and values here are correspondingly affected. Ruling prices here are about 48c. to 50c. for first picked; 38c. to 35c. for second; 26c. to 28c. for third; 22c. to 23c. for fourth; 19c. for fifth, and 15c. to 16c. for sorts.

*Chicle* is not inquired for to any extent and prices are barely steady at 35c. to 36c., as to quantity.

*Camphor* has been reduced by city refiners to 55c. to 56c. for barrels and cases respectively. The reduction is due, it is said, to concessions of price in crude gum by the London syndicate. Japanese refined has responded to the drop in domestic and is quoted at similar prices.

*Senegal* has hardened in sympathy with Arabic and numerous sales of picked are reported at 18c. to 20c.; sorts held at 13c. to 14c.

*Shellacs* have shown no improvement during the interval, the demand being of a limited character. Prices are without quotable change.

*Tragacanth* is meeting with about the usual jobbing demand at the previous range of value.

## ROOTS AND SEEDS.

Little of interest has transpired in the market for Roots and Seeds since our last report. *Gentian* has receded a trifle and may be purchased at 5c. on the spot. New crop for forward shipments has been quoted at prices on the basis of 3½c., delivered here. No changes in prices of other Roots have come to the surface, and outside of ordinary jobbing distribution there is little business doing.

*Canary seed* is quoted at 2c. to 2½c. for Smyrna. *Celery* is selling fairly at 12½c. *Coriander* is held and selling at 4c. to 4½c. for Natural and 4½c. for Bleached. There is nothing new to report on other Seeds.

# American Druggist and Pharmaceutical Record.

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## LEADING ARTICLES.

A valuable and interesting symposium of views on the best five books for beginners in pharmacy will be found on pages 241-242.

A further installment of Professor Beal's "Synopsis of the Pharmacy Laws of the United States," is given on pages 243-244.

Recent work in chemistry and pharmacy is described in our department of Pharmaceutical Progress on page 245.

We illustrate a new extracting apparatus on page 246.

Articles of considerable technical value on assay processes for cream tartar and nuxvomica are presented on 247-248.

The preparation of silver salts in pill form is described on pages 249-250.

The Scientific Section of the American Pharmaceutical Association are out with suggestions for papers for the Montreal meeting (p. 250).

Business Hints by the Department Editor are continued on page 252. An interesting communication from the New England Retail Drug Union, will also be found on this page.

## A Two Hundred Dollar Prize Competition.

A LEADING feature of the magnificent special number of this journal which will be issued on August 25, 1896, will be the publication of the results of a series of special prize competitions, details of which occupy a double page announcement on pages 28 and 29 of this issue, and in which competitions we cordially invite a full and free participation on the part of our readers. This number will also contain a graphic, illustrated account of the meeting of the American Pharmaceutical Association at Montreal.

### OUR BUSINESS HINTS.

We feel that we can justly claim the credit of having, directly and indirectly, caused a wonderful improvement in the quality of the advertising of the retail drug trade of the United States during the past four years, for the AMERICAN DRUGGIST was the first drug journal to inaugurate a special department devoted to the subject of advertising, a department which has been kept up to a high standard of excellence ever since its first appearance in 1892.

We offered in that year one hundred dollars in prizes for papers and ideas on advertising for retail druggists. The interest aroused by this offer was most profound and wide spread, while the contributions received in reply not only attested the wisdom of the selection of this topic, but also showed the great need which existed for educating the druggists of the country to advertise and how to do so.

It was with a view to supplying this need that the department of advertising was inaugurated in the AMERICAN DRUGGIST under the heading Business Hints, with the most satisfactory results both in the interest aroused by the department and in the results as shown in the improved character of the advertising of our readers. Our good example was followed by other drug journals both in Europe and America, and the aggregate results of their combined labors are shown in a vast improvement in the character of advertising done throughout the United States. These results are all traceable either directly or indirectly to the efforts of the AMERICAN DRUGGIST as a teacher of advertising.

### THE ADVERTISING COMPETITION.

With a view to ascertaining more definitely the extent of the improvement in advertising among the retail drug trade, we again offer one hundred dollars in prizes for ideas and papers on advertising, the sum to be apportioned as follows:

**Forty dollars** for the best paper giving a general plan of advertising for a retail druggist, with details as to the amount to spend in proportion to the profits of the business, and practical suggestions as to the relative value of different methods of advertising and how they should be utilized.

**Thirty dollars** for the best plan for the arrangement of a drug store and show windows, accompanied by photographs or rough sketches and descriptions. The sketches will be received, no matter how rough, providing they convey definite ideas of the subject.

**Fifteen dollars** for the best set of three 8-inch newspaper advertisements of a retail drug store, either printed or with general directions as to type and display.

**Fifteen dollars** for a photograph or sketch (however rough), with detailed description, of the best window display for a retail drug store.

### THE FORMULAS COMPETITION.

The technical side of pharmacy will also be looked after in this special August number of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, since in it will be announced the results of a fifty-five dollar prize competition for the best

practical formulas submitted, as follows:

**Twenty-five Dollars** for the best five formulas for pharmaceutical preparations, such as elixirs, syrups, etc.

**Fifteen Dollars** for the best five formulas for specialties intended for sale over the counter.

**Ten Dollars** for the best three formulas for soda fountain syrups.

**Five Dollars** for the best original syrup formula. This last is a special prize offered by a subscriber to the **AMERICAN DRUGGIST**, the formula to be published in the columns of this journal.

#### A preliminary announcement of THE SIDE LINES COMPETITION.

This competition appeared in the issue of the **DRUGGIST** for April 10, and it is further elaborated in our advertising pages. Intending competitors are requested to submit papers suggesting some particular side line which can with profit be taken up by the pharmacist, and giving full details as to the cost of goods, margin of profit, adaptation to locality, and methods of introducing, etc. For the best three papers submitted there will be awarded fifty dollars, to be divided into sums of twenty-five dollars, fifteen dollars and ten dollars respectively.

#### OTHER FEATURES OF THE SPECIAL NUMBER.

The special number of the paper containing the announcement of the results of the above competition will also contain a full, accurate and readable account of the meeting of the American Pharmaceutical Association, to be held at Montreal, besides a number of other special features which will render it unique in the annals of pharmaceutical journalism.

These special features alone, independent of the fact that a copy of the paper is to be sent to every pharmacist in the United States who has a commercial rating, will make this special number immensely valuable as an advertising medium, and advertisers who wish to secure good locations in that issue should send in their orders early.

#### REFORM ADVOCATED IN PUBLIC CONTRACTS.

**M**ANY of the charitable institutions and municipal departments throughout the country make it a practice in advertising for drug supplies of specifying particular makes of drugs and chemicals, often at the caprice of some town officer or apothecary, who has developed a fancy for the products of some special house. This practice has never been influential in raising the prestige of

the United States Pharmacopoeia, but, on the contrary, has served in many instances to cast discredit upon the tests and requirements of our standard of authority.

The excess to which this practice was carried by the drug department of one institution was so marked as to direct special attention to the matter, and a means of relief has been sought by the jobbing druggists of New York City, by the introduction, at the last regular meeting of the Drug Trade Section of the New York Board of Trade, of a resolution directed against it. The protest was embodied in the following preamble and resolution, presented by **ALBERT PLAUT** of the firm of Lehn & Fink:

*Whereas*, In the specifications for bids on drugs and medicines of many of our Governmental and municipal departments, frequently certain makes and manufacturers are designated, and such limitations serve to stifle competition and to limit the number of bidders; and

*Whereas*, In the case of all articles which are official in the U. S. Pharmacopoeia the tests and requirements of the Pharmacopoeia are sufficient to insure their purity and quality;

*Resolved*, By the Drug Trade Section of the New York Board of Trade and Transportation that the designation "U. S. P." should be sufficient guarantee to the purchaser as regards quality, without restricting bidders to certain sources of supply.

*Resolved*, That we recommend in all contracts by public institutions and departments drugs and medicines should be specified without the name of the manufacturer, if the articles are official in the U. S. Pharmacopoeia. Any other system is unwise and unjust discrimination.

*Resolved*, That copies of these resolutions be sent to the several drug exchanges and associations throughout the country, with a request that they take similar action.

The introduction of this resolution precipitated an interesting discussion, the surprising feature of which was the preponderance of favorable sentiment toward its adoption. The mover of the resolution explained his reasons for introducing it in a very convincing way. He recited the annoyances which his house, in common with all others, experienced by reason of the absurd specification of brands by public institutions when inviting bids for medical or surgical supplies.

It was not the purpose of the resolution, Mr. PLAUT said, to interfere with the specification of any specialties which the owners have introduced to the favorable consideration of these institutions, but when regular U. S. P. goods were wanted the interests of no one were really subserved by these specifications.

The motion was put to a vote and adopted.

The co-operation of drug exchanges and other associations throughout the country will now be solicited, and through this means a powerful influence will be brought to bear upon the Government, State and municipal departments to change the method of inviting proposals and awarding contracts for goods.

#### MOVING INTO

#### LARGER QUARTERS.

**T**HE constant growth in the volume of business done by the **AMERICAN DRUGGIST**, both in its subscription and advertising departments, has necessitated the moving of the publication offices to larger and more commodious quarters, and we have been fortunate in securing a suite of offices at 62 to 68 West Broadway, which are centrally located, easy of access and promise to give us sufficient room to accommodate an even more rapid growth than our business has had during the past four years. These offices are immediately opposite the building previously occupied by us at 65 West Broadway, and we extend to our friends and patrons in the trade a cordial welcome to call upon us as their convenience may dictate. No other journal going to the drug trade has made such rapid progress as has the **AMERICAN DRUGGIST** during the past two years. We feel that we owe a large measure of the success we have met with to the cordial co-operation which we have had from our large circle of friends and subscribers in the retail trade; and we will make every effort to continue to deserve their confidence and support. One evidence of our earnest desire to do this is shown in the prize competition offer referred to in another column; and we trust that our friends will take so warm an interest in this competition as to make it the most successful affair of the kind that has yet been put before the public, for its success will redound to the benefit of every one of our readers.

**T**HE seventy-fifth anniversary of the foundation of the Philadelphia College of Pharmacy was celebrated by a banquet, on April 22, in a manner befitting so important an epoch in the history of pharmaceutical education in America. The early history of this institution may almost be said to be the history of pharmaceutical education of that day, for it was a pioneer and stood for many years alone in the work. Age has brought honors, but not decrepitude, and the hearts of thousands of graduates from its halls scattered all over the civilized world will warm toward their noble alma mater on this auspicious occasion.

We are advised by telegram as we go to press of the death, on April 23, of Dr. CHAS. O. CURTMAN of St. Louis, a distinguished member of the American Pharmaceutical Association. The news will be received with deep sorrow by his many friends throughout the country. A sketch of his career and life work will appear in our next issue.

# The Five Best Books for Beginners in Pharmacy.

## OPINIONS OF LEADING TEACHERS.

REMINGTON FOR PHYSICS, COBLENTZ FOR CHEMISTRY AND MATHEMATICS, AND CASPARI FOR DISPENSING AND THE INTERPRETATION OF THE PHARMACOPŒIA.

### A BETTER PRELIMINARY EDUCATION FOR PHARMACY STUDENTS ADVOCATED.

THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD recently solicited the opinions of a number of the foremost authorities in pharmacy as to the five books most suitable for the beginner in pharmacy. Responses were received over a large field and from teachers whose authority in matters affecting pharmaceutical education is unquestioned. It will be seen from the installment of letters presented in this issue that considerable diversity of opinion exists as to the books best adapted for the study of a single subject. Grouping them in the order of their popularity, the following works are those which received the highest preference:

U. S. Pharmacopœia.  
Remington's Pharmacy.  
U. S. Dispensatory.  
Sayre's Materia Medica.  
Gray's Botany.

A few of the responses were of a general character, no text books being indicated by name. Professor Coblenz, whose communication is presented first, does not believe in beginners taking up the study of technical pharmacy without first acquiring a thorough knowledge of the elementary branches taught in grammar schools, and he confines himself particularly to the discussion of this branch of the subject. The full list of contributors follows:

JOSEPH P. REMINGTON,  
WILBUR L. SCOVILLE,  
C. S. N. HALLBERG,  
OSCAR OLDBERG,  
A. B. STEVENS,  
JAMES M. GOOD,  
GEO. B. KAUFFMAN,  
H. D. DIETRICH,  
OSCAR C. DILLY,

CHAS. CASPARI, JR.,  
FREDERICK J. WULLING,  
C. T. P. FENNEL,  
J. T. MCGILL,  
WYMOND A. BRADBURY,  
F. P. DUNNINGTON,  
F. J. SHADD,  
DAVID WALKER,  
CHAS. M. FORD.

VIRGIL COBLENTZ,  
GEO. F. PAYNE,  
W. M. SEARBY,  
E. A. RUDDIMAN,  
JULIUS A. KOCH,  
GEORGE WAGNER,  
B. S. YOUNG,

### PROF. V. COBLENTZ.

College of Pharmacy of the City of New York.

I consider the needs of the beginner in pharmacy are a thorough knowledge of arithmetic, grammar and geography, more particularly, however, arithmetic. In this he should be thoroughly proficient, and be able to solve all kinds of problems in percentage, decimals, fractions, etc., without a moment's hesitation.

A deficiency of knowledge in these common school branches is the greatest difficulty that beginners and students have to contend with. When these are properly mastered, further study and progress is a simple matter. The next advice to the beginner is that he should not aim to master advanced subjects before he has prepared a thorough foundation in the elements. For example, many hasten on to the subject of quantitative analysis, the assay of drugs and chemicals before they really comprehend qualitative analysis or the fundamental principles of general chemistry. Above all, let the beginner be thorough in all that he takes up and avoid trying to grasp too much at once, for we have too

many of these superficial "Jacks of all trades." If the student will glance through the various college catalogues he will find an abundance of references to good text books.

V. COBLENTZ.  
NEW YORK CITY.

### PROF. CHAS. CASPARI, JR.

Maryland College of Pharmacy.

The question you present seems easily answered, and yet no matter what suggestions be made by those connected with colleges of pharmacy they are apt to be construed as of a partisan character. We have no book wholly intended for beginners in pharmacy, similar to Hager's "First Lessons," published in Germany, but we have several excellent text books, not only on pharmacy, but also on chemistry and botany, which can be read with much profit by young pharmacists and as an aid in such study (even for those attending college) Professor Beal's recent work, entitled "Pharmaceutical Interrogations," will be found exceedingly valuable.

CHAS. CASPARI, JR.

BALTIMORE, Md.

### PROF. JOSEPH P. REMINGTON.

Philadelphia College of Pharmacy.

Your letter asking me for an opinion to be written for publication, stating the best five books for students in pharmacy, has been received. I suppose you have sent this letter out of courtesy and without expecting a reply from me. It would be scarcely proper for me to give a public opinion, inasmuch as I happen to be an interested party in two works prominent in pharmaceutical education. I am sure you will appreciate the situation.

JOSEPH P. REMINGTON.

PHILADELPHIA, PA.

### PROF. C. S. N. HALLBERG.

National Institute of Pharmacy.

Until quite recently there could have been but little or no choice as to the best five books, since, with the exception of the Pharmacopœia and the Dispensatories, there were only about five books adapted to the beginner. Now, however, it is different and it is possible that the new century will be as conspicuous from a plentitude of pharmaceutical books, as was the greater portion of the present century remarkable in its paucity of them. The more books there are the better they will be, each one proving an incentive to improvement.

### A GENERAL RULE FOR THE SELECTION OF BOOKS.

In the selection of books, one general rule at least may be laid down, viz.: that the fundamental principles must first be thoroughly studied and mastered. Without a thorough comprehension of such physical laws as are concerned in pharmaceutical problems—i. e., specific gravity, heat and its application, and other agencies involved in the operations concerned in changes of aggregation—no permanent knowledge can be obtained. All pharmaceutical operations may be referred to changes in aggregation, and the various processes upon which these are based must be mastered in their proper and logical sequence before the student obtains a real intelligent conception of their relations and conditions for operative work. Sufficient care has heretofore not been taken in American works to emphasize this fundamental principle of all German works on pharmacy. A work which more nearly fills this want is the "Handbook on Pharmacy," by Prof. V. Coblenz.

### PHYSICS AND CHEMISTRY.

The subject of physics should be preceded or elucidated by the study of Trowbridge's or Avery's Physics.

Of works on chemistry, it is difficult to choose, as only a teacher in chemistry can keep pace with the numerous works that are issued. We have for years recommended Simon's "Manual of Chemistry" and Curtman's "Analytical Chemistry."

### BOTANY AND MATERIA MEDICA.

Relative to works on botany and materia medica we must make the same admission. We were instrumental in the publication of Basten's "Botany," as there was no work of a pharmaceutical character, and other things being equal, it is our opinion that works for pharmacists should be written by pharmacists.

As to materia medica, we are not sufficiently familiar with recent works to

have a decided preference. The work of Sayre appears to be desirable, but personally I prefer the U. S. Dispensatory for American drugs and the National Dispensatory for the study of foreign drugs.

But this leaves the very important subject of the pharmacy of the organic drugs out of consideration. There is no work in the English or any other language that compares with Schmidt's "Pharmaceutische Chemie" (II. Liepzig). Remington's "Practice of Pharmacy" is the only book treating the organic drugs according to their constituents, the by far most important consideration to the pharmacist, and is the work that should be studied. Its treatment of the pharmaceutical mixtures, of solids, and extemporaneous compounding and dispensing of prescriptions is also of value.

#### NOT BOOKS SO MUCH AS WILL AND METHOD.

But after all it is not the books selected so much as it is the will to study and the method pursued; "this is the lac in the *Nuclei Cocae*." The method provided by the system of lectures sent semi-monthly, alternating the study with answering questions on them in writing and reviewing corrections and observations of these answers for review purposes, constitutes one of the best, if not the best, plans for systematic study yet devised. Its motto is *Nulla dies sine linea*. Every apprentice should acquire a certain amount of information in the pharmaceutical sciences, so that when entering a college of pharmacy he may learn more readily, make better progress, utilize the opportunities in the highest degree in order that the knowledge acquired may be resolved into a real, substantial education in its broad sense.

HALLBERG.

CHICAGO, ILL.

#### PROF. JAMES M. GOOD.

St. Louis College of Pharmacy.

I would suggest the following books for students in pharmacy:

U. S. Pharmacopoeia.  
Sadtler's and Trimble's Text Book of Chemistry.  
U. S. Dispensatory.  
Bastin's College Botany.  
Practical Pharmacy, and one of the three, Remington, Caspari or Coblentz.

J. M. GOOD.

ST. LOUIS, MO.

#### PROF. OSCAR OLDBERG.

Northwestern University, School of Pharmacy.

Your note asking my opinion about books for students, naturally occasions some embarrassment. You ask me what five books are best for the beginner, and I am obliged to include my book entitled, "Home Study in Pharmacy," as one of these five, knowing very well that it is more suitable than any other book with which I am at all acquainted. Another book which the beginning student really ought to have is a suitable elementary work on structural botany, a book on organography. It may be that Gray's "First Lessons in Structural Botany" is a little out of date and possibly not the best for botanical students, and yet I do not know any better book for students of pharmacy. It is my opinion that you would do the beginning pharmaceutical student a very good turn by frankly and pointedly advising him to

learn arithmetic thoroughly. I find that a very large proportion of the students of pharmacy, even those coming to the schools of pharmacy with diplomas from high schools, are extremely weak in arithmetic. My book called "Pharmaceutical Problems and Exercises" is certainly a most useful book for beginners, and the new edition, which will very soon be published, will contain all necessary rules and methods by which the student can learn pharmaceutical arithmetic and work out the problems in that book. Of the several works on pharmacy which we have in the English language, I regard Caspari's book as, in many respects, to be preferred to the others, and hence I use it as a text book in our school.

OSCAR OLDBERG.

CHICAGO, ILL.

#### PROF. FREDERICK J. WULLING.

The University of Minnesota, College of Pharmacy.

If a student can have only five books, I think he could do very well with the following:

Remington's Pharmacy.  
Sayre's "Organic Materia Medica and Pharmacognosy."  
Welling's "Elements of Medical and Pharmaceutical Chemistry."  
Douglass & Prescott's "Qualitative Analysis."  
Schimpf's "Volumetric Analysis."

FREDERICK J. WULLING.

MINNEAPOLIS, MINN.

#### PROF. WILBUR L. SCOVILLE.

Massachusetts College of Pharmacy.

A definite answer to the question of the best five books for a beginner is not easy because the early education of the embryo pharmacist and the conditions or place of his apprenticeship all have their influence; and different books have each their special adaptation to special conditions. Moreover, the question of expense is to be considered, for an extended treatise may be simple and plain though expensive and beyond his immediate needs.

I will endeavor to give an opinion which may fit the pharmacist of a grammar school education, and who is serving his apprenticeship in an average store.

1. The United States Pharmacopoeia, which will be an enigma and a puzzle to him at first, but if used persistently will be of great value to him later through its drill in concise, direct and accurate statements. It is crystallized knowledge and he should learn to appreciate and avail himself of it.

2. One of the three standard works on pharmacy: Remington for the physical operations of pharmacy, Coblentz for the chemical operations and for mathematics, and Caspari for dispensing and the interpretation of the Pharmacopoeia. It is unfortunate that these three considerations are not well combined in one book, but at present the student must take his choice.

3. "Simon's Chemistry," or if the student has previously taken a good course in chemistry, Sadtler's and Trimble's Chemistry.

4. Sayre's "Materia Medica."

5. One of the Dispensatories: the National Dispensatory for materia medica and therapeutics, or the United States Dispensatory for the chemistry of drugs and their preparations.

WILBUR L. SCOVILLE.

BOSTON, MASS.

(To be Continued.)

## PHARMACISTS IN THE ARMIES AND NAVIES OF THE LEADING EUROPEAN STATES.\*

### XIII.

#### Denmark.

In this country, during peace, the troops are supplied with medicines from the ordinary pharmacies. There is only one military hospital, that of Copenhagen, in which a military pharmacist is employed.

All other hospitals obtain their stock of medicines from ordinary pharmacies; the surgeons themselves dispense domestic remedies.

#### NAVAL SURGEONS AS DISPENSERS.

On the ships of the Danish navy the surgeons are also the dispensers of medicines.

During their term of military service the pharmacists may, according to their preference, be either soldiers or hospital stewards. If, as a rule, they choose the latter alternative, they are employed in a hospital for four and one-half months, and receive a military training in the sanitary detachment for two and one-half months.

No provision seems to have been made for camp pharmacists who have already been appointed and by a special training made fit to be employed during a war.

#### QUALIFICATIONS OF THE PHARMACIST.

For entrance to the profession graduation from a classical college is required. The special education begins with three and one-half years' practical experience in a pharmacy, ending with an examination, which is held twice a year in Copenhagen. The examining board consists of two examiners, one of whom must be a pharmacist. A candidate who has passed is designated as an "Examinatus Pharmaciae." At present (1893) the university can then be entered immediately. Beginning with the year 1896, a period of clerkship of one year will be required.

At the university the students are obliged to take the course of the pharmaceutical institute, which begins on November 1 of each year and is concluded on December 22 of the following year. Then a final examination follows; those who have passed receive the designation of "Candidatus Pharmaciae" and obtain the right to manage or own a pharmacy, provided that they are 25 years old.

This concludes the series of papers which have been published in these columns during the past months, in the course of which the position of the military pharmacist in foreign countries has been presented in the order indicated in the foot note. Some notes upon the service in the United States will appear in a later issue of the AMERICAN DRUGGIST.

\* Translated from the *Pharmaceutische Zeitung*, by Otto Hoffmann, A.B., under the direction of Dr. Geo. F. Payne, chairman of the Special Committee of the A. Ph. A. appointed at the Asheville meeting to work for the fuller recognition of pharmacists in the army and navy of the United States. The publication of the series was begun in this journal for September 10 and so far there have appeared descriptions of the position of the pharmacist in the German army (September 10), the German navy (September 25), the Austro-Hungarian service (October 10), the Italian service (October 25), the French service (November 25), the Russian service (December 10), the English service (December 25), the Swiss service (January 10), the Belgian service (January 25), the Dutch service (February 25), the Norwegian service (March 10) and the Swedish service (March 25).



# A Synopsis of the Pharmacy Laws of the United States.\*

A Summary of the Principal Provisions of the Various Laws Pertaining to the Practice of Pharmacy.

BY J. H. BEAL,  
Scio, Ohio.

THE object of the following papers is to present in a form convenient for reference, and free from legal verbiage, the principal features of the several pharmacy laws of the American Union, the provisions chiefly referred to being as follows: The dates of enactment and amendment of the laws and the extent to which they apply over the State. The constitution and selection of the examining boards, their revenues, powers, and compensation; the grades of licenses issued, the legal qualifications of licentiates, and the credit allowed for diplomas in medicine and pharmacy; and the fees for registration and renewal, provisions affecting adulterations, the labeling of poisons, etc.

*Unless otherwise expressly stated in the abstracts given it is to be understood:*

1. That each law applies territorially to the entire State which enacted it.
2. That the style of the examining board is simply Board of Pharmacy or State Board of Pharmacy.
3. That the number of years for which the members hold office is equal to the number of members on the board, i. e., if the board has five members the term of office is five years.
4. That the statutory titles of the licentiates are Registered Pharmacist and Registered Assistant, or Assistant Pharmacist.
5. That the certificates of other boards and diplomas of colleges of pharmacy and medicine are not recognized by the law.
6. That there is no statutory requirement of age and experience.
7. That no renewal of registration is required.
8. That the Pharmacy Act does not prohibit adulterations nor require the labeling of poisons.
9. In general that when the abstract does not mention any particular subject, it is because the pharmacy law is silent upon the point in question.
10. That certain provisions uniformly present in all the laws are omitted, such, for example, as the provision for the registration without examination of those engaged in pharmacy at the time of enactment of the law. Such provisions are of temporary and local interest only and would occupy space without imparting information.

In order to avoid needless repetition, the following general forms of poison and label laws are given, and are referred to by number under the States which have the same or similar provisions:

## General Form of Poison and Label Law.

### FORM NO. 1.—Schedule A.

Arsenic, and its preparations, corrosive sublimate, white precipitate, red precipitate, red mercuric iodide, potassium cyanide, hydrocyanic acid, strychnine, and all other poisonous alkaloids, and their salts, essential oil of bitter almonds, opium and its preparations, excepting paregoric and other preparations of opium containing less than 2 grains to the ounce.

### Schedule B.

Aconite, belladonna, colchicum, conium, nuxvomica, henbane, sayin, ergot, cotton root, cantharides, creosote, digitalis, and their pharmaceutical preparations, croton oil, chloroform, chloral hydrate, zinc sulphate, mineral acids, carbolic acid and oxalic acid.

The articles contained in both schedules must be labeled, both on the container and on the outside wrapper, with the name of the article, the word "Poison," and the name and place of

business of the seller. Nor may any such article be delivered until it has been ascertained that the purchaser is aware of its poisonous character and desires it for a legitimate use. In addition to the preceding, when any article in Schedule A is sold an entry must be made in a book kept for the purpose, stating the date of the sale, the name and address of the purchaser, the name of the article, the purpose for which it is to be used, and the name of the dispenser. This record must be preserved for at least five years. The requirements as to labeling and recording do not apply to poisons dispensed on physicians' prescriptions, when not in unusual quantities or doses.

### FORM NO. 2.

The same as No. 1, except that all named poisons are embraced in one schedule and that the recording of the circumstances of the sale is not necessary.

Variations from the above forms are noted under the laws in which they occur.

It should also be remembered that the synopsis purports only to give the provisions of the "Pharmacy Act" itself. The criminal code of the State may contain other laws affecting the practice of pharmacy, or the State Board may have rules fixing fees less than allowed by the statute, or requiring age and experience when the law does not. In only a few laws are such facts referred to.

Some of the laws are so loosely drafted as to leave the meaning of certain provisions in doubt. In such cases the writer has adopted that interpretation which seemed to him most probable.

In some instances the date of enactment could not be obtained, and in the case of a few others the dates given are open to doubt. The writer will be thankful for the correction of any errors which he may have made. The writer desires also to express his obligations to the Secretaries of various boards, for courtesies shown, and to Caswell A. Mayo, Editor of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, for assistance in procuring copies of the laws and for revising the abstract of the laws of New York.

## Indiana.

Indiana has no pharmacy law.

## Indian Territory.

The Indian Territory has no pharmacy law.

## Iowa.

Enacted 1880. Amended 1882, 1886, 1888 and 1890. The "Commissioners of Pharmacy" consist of three members appointed by the Governor with the advice of the Executive Council. The sum of \$2,000 of the receipts from licenses is appropriated for the expenses of the commissioners. The remainder must be covered into the State treasury.

There is but one grade of licentiate, known as registered pharmacist.

Graduates of incorporated colleges or schools of pharmacy which require a practical experience of four years before granting diplomas are licensed without examination.

The fee for examination and registration is \$5, for registration on diploma \$2. There is an annual fee of \$1.

General dealers may sell proprietary medicines, such "domestic remedies as do not include intoxicating liquors or poisons," and potash and soda lye; but the two latter must be plainly labeled with the name and the word poison.

The section regulating the sale of poisons corresponds to Form No. 1.

Pharmacists are forbidden to either sell or give away intoxicating liquors as a beverage.

Willful adulteration is prohibited, and pharmacists are held liable for the quality of goods sold, except for those which are dispensed in original packages, and for patent medicines.

Itinerant vendors of nostrums who publicly profess to cure injury, disease or deformity by medicine or other expedient must pay an annual license fee of \$100.

Conviction for adulteration, or for repeated violations of the liquor law, works a forfeiture of license.

In addition to the regular pharmacy act, there is a special act containing 21 lengthy sections regulating the obtaining of a permit to sell alcoholic liquors for medicinal purposes. Among other elaborate provisions notice of application for a permit must be published several weeks before the application is made, a bond of \$1,000 must be given, and the applicant must subscribe to a promise, under oath, not to violate or disregard any of the provisions of the law. All sales of liquor must be recorded.

Penalties recovered for violations of the Pharmacy law and liquor act inure to the common school fund, but the board is entitled to receive from the State treasurer an amount equal to 50 per cent. of the net proceeds of the recovered penalties.

## Kansas.

Enacted 1885. Amended 1887.

The Board of Pharmacy consists of five members appointed by the Governor from nominees presented by the Kansas State Pharmaceutical Association. The term of office is three years. The members receive \$3 per day and expenses, the secretary \$600 per annum and expenses. The board is required to hold examina-

\* We have published abstracts of a number of State laws in this series, as follows: Alabama, Arkansas, California, Colorado and Connecticut in the issue for March 25, p. 180; Delaware, District of Columbia, Florida, Georgia, Idaho and Illinois in the issue for April 10, p. 212.

tions four times a year in different parts of the State.

Two grades of licentiate are provided for. Pharmacists must have four and assistants two years' experience.

Graduates of "recognized schools of pharmacy" are registered as pharmacist without examination. The fee for examination and registration is \$5 for pharmacist and \$3 for assistant, and for registration on diploma \$3. Annual renewal is required, but no fee is specified. If renewal is not made by first day of July, the secretary of the board notifies the delinquent, who must then pay a fee of 50 cents. If the fee is not paid within 30 days thereafter the delinquent's name is stricken from the register, but may be restored within one year by the payment of \$5. A licentiate who changes his place of business must notify the secretary of the board and inclose a fee of 50 cents for change of registry.

"In rural districts where there is no registered pharmacist within 5 miles," retail merchants may be licensed, at a cost of \$2.50 annually, to sell the usual domestic remedies not included in the schedule of poisons.

The poison and label law corresponds to Form No. 1, with the following exceptions:

1. Schedule A includes, by name, chloroform and morphine.

2. Schedule B omits savin, ergot, cotton root and chloroform, and includes sugar of lead and all other "virulent poisons."

3. A third schedule, C, is given, including oils of savin and tansy, ergot and cotton root and their preparations, and "all other active emmenagogues and abortives."

4. The sale of every article in both A and B must be recorded, and the articles in Schedule C may be dispensed only on the prescription of a legally qualified physician.

5. Sales to photographers and practicing physicians are excepted. Pharmacists must preserve prescriptions compounded by them.

The pharmacist is held responsible for the quality of all drugs, chemicals or medicines dispensed by him. Fraudulent adulteration of drugs is forbidden. Conviction for adulteration, or for violation of the prohibitory liquor law, or for habits of intoxication, works a revocation of registration.

#### Kentucky.

Enacted 1874 (?). Amended 1888 and 1898. The law applies only to towns and cities having 1,000 or more inhabitants.

The board consists of five members appointed by the Governor from nominees presented by the Kentucky State Pharmaceutical Association. The board fixes the compensation of its members.

There is but one grade of licentiate, who must have three years' experience and be not less than 18 years of age.

Graduates of schools or colleges of pharmacy incorporated by the *General Assembly of Kentucky*, and which require three years' experience before graduation, are registered without examination.

Graduates of an incorporated school of medicine who have practiced and compounded medicine for five years in Kentucky, and non-graduates who have practiced and compounded medicine in Kentucky for ten years prior to the passage of the act, may register without examination.

The registration fee is \$5. In addition the certificate must be recorded in the

county where it is to be used, and each year application must be made to the county court for renewal. The first record and each renewal costs 50 cents. Annually the county clerk must make a report of registered pharmacists to the grand jury and to the board of pharmacy.

The poison schedule is long and complicated. It includes all of the articles found in Form No. 2, and all poisonous alkaloids, derivatives and preparations of the same, except colchicum, carbolic acid, oxalic acid and sulphate of zinc. It contains in addition, ether, green, black and white hellebore, black and blue cohosh, physostigma, cannabis indica and sativa, cocaine, cocculus, curara, elaterium, green iodide, cyanide, red and yellow oxides, yellow sulphate and nitrate of mercury, silver nitrate, ignatia, phosphorus, caustic potash, prussian blue, poison oak, scammony, caustic soda, oils of tansy and pennyroyal, stramonium, nitroglycerin and nitro benzol, and all proprietary or secret medicines sold as emmenagogues or parturients, or which contain a large proportion of opium or other powerful narcotic.

All of the above when sold must bear the word poison, a skull and bones, the dose for an adult, the name of the pharmacist, and some "practical antidote." The seller must be satisfied that the purchaser is of lawful age, knows the danger of the poison bought and desires it for a legitimate use. Before delivering the poison the seller must record the circumstances of the sale as in Form No. 1. Failure to comply with this section renders the seller liable to a fine of \$50, and "for all damage done."

Adulteration, sophistication and substitution are prohibited under penalty. "Any medicine or drug used after becoming inert from age or exposure shall be deemed a substitution."

The board shall make a chemical examination of any suspected article which is sent them, and return to the sender a "written analysis," for which they may charge a fee not exceeding \$30.

Prescriptions must be numbered serially, and preserved two years. On the order of the attending physician the pharmacist must furnish a duplicate.

The law does not apply to wholesalers, nor to the manufacture or sale of proprietary medicines, nor to the sale of 82 enumerated substances, among which are included such articles as alcohol, dulcamara, podophyllum, mercurial liniment, lobelia, carbolic acid and several other active drugs.

#### Louisiana.

Enacted 1887. Amended 1879, 1888.

The Board of Pharmacy consists of nine pharmacists selected and appointed by the Governor. The term of office is four years. The board is authorized to apply all fees collected by it to the payment of its expenses.

There is but one grade of licentiate. The law permits the registration, without examination, of persons who are 21 years of age and who are graduates of schools and colleges of pharmacy approved by the board,\* or who show by affidavit that they have had four years' experience under the tuition of a registered pharmacist, and licentiates of other States.

The fee for examination is \$5, and for issuing a certificate \$3. There is no statutory requirement as to the age or

\* The board recently resolved to recognize no diplomas, but to require all to submit to an examination.

experience of those who may be licensed by examination, or on certificates from other boards.

The act permits unregistered persons to sell proprietary medicines and the commonly used standard medicines and poisons, provided these articles conform to the provisions of the label law. Planters may also furnish medicines to their hands and tenants, and in places where there is no licensed druggist within 8 miles merchants may sell drugs in original packages, if put up and labeled by a registered pharmacist.

Every package of drugs, medicines and chemicals must be plainly labeled with the name of the article, name of the proprietor, place of sale, and name of the prescribing physician. If the article is poisonous it must bear, in addition, the word poison and a skull and cross bones. Every prescription "must have, in addition thereto," a number, the date of compounding, and the name of the actual compounder, and directions for the internal or external use of the same.

#### Maine.

Enacted 1877. Amended 1885, 1898.

The board consists of three "Commissioners of Pharmacy," appointed by the Governor with the advice and consent of the council. The act is silent as to the compensation of the commissioners, except that they are entitled to demand and receive fees for examination and registration.

Two grades of licentiate are recognized, styled respectively registered apothecary and qualified assistant.

Applicants for registration by examination as apothecary must either show three years' experience or be a graduate of a recognized college of medicine or pharmacy. Graduates of any duly established medical college in the United States, in active practice, "may do the business of an apothecary without being registered."

Qualified assistants must be 18 years of age and have two years' experience. No renewal fee is required, but the fee for first examination is \$10 for apothecary and \$5 for qualified assistant.

Proprietary medicines are excepted from the provisions of the act.

#### Maryland.

Enacted 1872. Amended 1876, 1892. Applies only to the city of Baltimore.

The board is styled "The Commissioners of Pharmacy and Practical Chemistry," and consists of three members appointed by the Governor from nominees presented by the Maryland College of Pharmacy. The commissioners hold their office for two years, and fix the time and place of their meetings. Nothing is said in the law about compensation, except that the money derived from fees shall be devoted to the discharge of the expenses accruing or arising under the law.

But one grade of licentiate, designated in the law as "pharmacist," is provided for.

Every person "holding a diploma from a regular chartered and incorporated college or school of pharmacy, based upon a full apprenticeship of four years as a pharmacist," is entitled to registration without examination. Any person having two years' practical experience, or who has attended one full course of lectures on pharmacy, chemistry and materia medica, is permitted to dispense drugs and medicines without the immediate oversight of a registered pharmacist, and thus

corresponds to the usual "assistant pharmacist" of other States, except that he need not be registered.

The fee for examination is \$5, and for registration \$1, with an annual renewal fee of \$1.

The legal representatives of a deceased registered pharmacist may continue the business by placing in charge a manager who is registered as pharmacist.

(To be continued.)



**The Preservation of Milk for Analysis** may be accomplished by the addition of potassium bichromate, says a Danish chemist.

**Anal** is a new remedy which has been recommended for hemorrhoids, fistula, lupus, etc. So far, no detailed information has been given as to the composition of the remedy.

**To Remove Spots from Marble.**—A correspondent of the *Pharmaceutische Zeitung* recommends the application of a paste of bole and benzine, to be followed by a polishing with wax, 10 parts, and turpentine, 90 parts.

**Gantein** is the name of a preparation for cleaning gloves, which (*Pharm. Post*) is composed of a solution of 30 parts of sodium sulphite, 5 parts of ammonia water, and 100 parts of white castile soap dissolved in 30 parts of distilled water by the aid of a gentle heat. The soap is first dissolved alone in the water and the other ingredients then added.

**Oil of Frejar.**—Under this name, Haensel, the maker of the well-known terpeneless essential oils, has introduced a new oil, likely to prove of great service in dermatology. In the crude state it is yellow, and contains resin; when rectified, it is colorless, and has a gravity of 0.9065 at 15 degrees. Its origin is in the Dutch Indies, where it is employed against skin diseases.

**Mignonette Flowers as a Tonic.**—According to a note in a Russian medical journal, a concentrated decoction of the flowers of mignonette (*Reseda odorata*) are much esteemed in Russia as a cure for tapeworms. The administration of the decoction is followed by a large dose of castor oil, and this is generally followed in three hours by the passage of the tapeworm.

**Fumigating Paper and Tapers.**—Rub together 50 parts of benzoin and tolu balsam and 10 parts of storax. Exhaust with 800 parts of alcohol, and in the filtrate dissolve 10 parts of Peru balsam, one-tenth of 1 part each of cinnamon

and lavender oils. With this solution drench blotting paper for making a fumigating paper, and for making fumigating tapers soak splints of soft wood, and dry the splints.

**Smokeless Colored Fires.**—First, heat barium or strontium oxide to a red heat; remove from the fire, and then add to it the shellac in the proportion of 1 part of shellac to 4 parts of stontia or baryta. Stir this mixture carefully until cool, by which means the shellac will be evenly divided throughout the mass. Finally, when cool, pulverize the mass. By adding about 2½ per cent. of powdered magnesium the effect of the colored fire is very much enhanced.

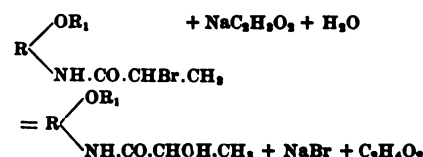
**Lassar's Treatment for Baldness.**—G. S.—This treatment is divided into five different heads, as follows: 1. Rub the head thoroughly with tar soap. 2. Rinse off with warm, and then with cold water, and finally dry. 3. Rub with a solution of corrosive sublimate containing 0.5 parts to 1,000. 4. Rub with a solution of naphthol, 8 parts, and alcohol, 150 parts. 5. Treat with an oil consisting of 2 parts of salicylic acid, 8 parts of tincture of benzoin and 100 parts of olive oil.

**Explosion in a Druggist's Warehouse.**—At Frueun, in the middle of last week, a very violent explosion took place in a druggist's premises. The whole of the warehouse and the neighboring room were completely destroyed. The assistant had gone down into the coal cellar with an open light, and it is supposed that the gas was escaping there. A very violent explosion followed. Although a considerable amount of benzine and spirit was stored in a room close at hand, this fortunately did not catch fire. The house was very badly damaged, and the windows of the adjoining house were blown in. The assistant was burned badly, but not fatally.—*Apotheker Zeitung*.

**An Acid-Proof Glue.**—The following has been recommended (*Journ. de Pharm. et de Chim.*) as producing a cement which will fasten glass or porcelain, etc., together firmly, and will not be affected by strong acids: Mix together

2 parts of powdered asbestos, 1 part of barium sulphate and 2 parts of sodium silicate of 50 degrees Beaumé strength. A still firmer glue can be made which is particularly valuable, since it is not attacked by hot acids, by mixing together 2 parts of sodium silicate, 1 part of the finest sand, and 1 part of finely pulverized asbestos. If potassium silicate is used instead of the sodium salt the glue will harden immediately, but otherwise it will require about an hour to set.

**Phenetidin Derivatives.**—Goldenberg, Geromont & Co. of Winkel-on-Rhine, have patented a process for the preparation of lactyl p phenetidid and allied derivatives of anisidin, etc. The halogen propionyl derivative of the base is prepared by the action of the bromide of a bromopropionic acid on the base, and this resulting compound is treated with salts of the carboxylic acids, such as sodium acetate in watery or aqueous solution. The resulting derivatives are formed (*Berichte*) according to the equation:



**Vanillin Patents.**—Three patents have recently been granted for the preparation of vanillin or its homologues. Isoeugenol is treated for a time with ozone, by which the  $\text{C}_6\text{H}_5$  group is oxidized to an aldehyde group with the formation of vanillin; or the sodium compound of isoeugenol is electrolyzed, and the resulting body is treated with an acid. The third patent, which is in the name of Schering & Co., is merely a slight modification of this firm's original patents.—*Berichte*.

**The Tincture of Aconite of the New Pharmacopoeia.**—A. S. W. writes: Can you explain to me and others the reason for the change in menstruum of the tincture of aconite of the Pharmacopoeia of 1890? Alcohol and water are ordered in place of alcohol. The color of the tincture made in this way is quite dark, and the tincture has but a slight sting. A physician who purchased some of the tincture did not believe it was aconite. I know that it is, for I made up two lots to satisfy myself. It does not look like that made from strong alcohol, but I am at a loss to know why it does not taste the same. I send you a small sample by mail, and shall be pleased to have your explanation in the next issue of your JOURNAL.

The sample of tincture submitted by our correspondent certainly presents a darker appearance than the tincture we have been accustomed to; but a test of its numbing effects on the mucous membrane of the lips showed it to be quite active. The fault, if any, does not, in our opinion, lie with the menstruum, which was selected by the Committee on Revision of the Pharmacopoeia, after most careful trials by a sub-committee, of which Professor Remington was chairman. Reference to the chairman of the Committee on Revision of the Pharmacopoeia elicited the information that no difficulty has been experienced by others in making a satisfactory tincture by the 1890 process. It is suggested that the aconite used by our correspondent was of poor quality, or the menstruum was allowed to pass through the powder too quickly.

### Sterilization of Milk.\*

By J. A. FORRET.

Sterilized milk is now frequently used for infant feeding, especially for infants of tender age. Though it is a commercial article it is not always available as such; and in many instances there will be the desire to prepare the milk at home, as often and in such quantities as may be required.

It is generally accepted that milk subjected to a temperature of 100 degrees C. for 20 or 30 minutes undergoes practically the same chemical changes as result from sterilization under pressure—i. e., at a temperature above 100 degrees. Dr. C. W. Earle† states that both clinical and chemical evidence lead to the belief that milk is injured as a food for infants by being heated to any temperature above 80 degrees; and that pasteurization at a temperature ranging between 70 and 80 degrees destroys most of the ordinary germs of milk, including the bacilli of tubercle, typhoid, cholera, etc., while the milk itself is not injured.

#### STERILIZING WITH DOMESTIC UTENSILS.

How then can the "cooking" be carried out by means of ordinary domestic utensils, and without employing a thermometer? Dr. Earle says that milk may be pasteurized by simply immersing the vessel containing it in boiling water that has been removed from the source of heat, and leaving it so immersed for half an hour. There is no mention of the volume of water relative to that of milk necessary to raise the latter to the required temperature. Mr. Malcolm Morris‡ directs the bottle containing the milk to be placed in a suitable vessel containing cold water, and the temperature of the water slowly raised to the boiling point. The vessel is then to be covered with a woolen cloth and set aside for half an hour. Here, again, the proportion of water to milk is omitted. Obviously, if the same proportions of water and milk be taken in both cases, the maximum temperature of the milk will be much higher by the latter method than by the former.

A pint of milk contained in an ordinary jar requires a bath of from 8 to 10 pints of boiling water to raise its temperature sufficiently high. The amount of heat required by this method is enormously greater than by that of Mr. Morris. The directions given by Mr. Morris, however, are insufficient; if we "heat slowly on a stove," overheating of the milk may result, whatever be the proportion of water to milk.

#### DIRECTIONS FOR THE PUBLIC.

Experiments were made with the view of determining suitable proportions and formulating simple directions for sterilizing. "Heat slowly," "heat over a brisk fire," etc., are at best vague. Perhaps the best way to indicate the amount of heat is to state the time required to boil a given quantity of water in which the vessel containing the milk is immersed. If the heat employed takes longer than the time stated, the temperature of the milk will be too high, and vice versa. "Place a jar containing a pint of milk in 8 pints of water contained in a cylindrical tin vessel, of such size that the level of the water and milk are about equal when the jar is supported

about  $\frac{1}{2}$  inch from the bottom of the water bath; raise the temperature of the water to the boiling point, after which allow the milk to remain in the water for about 15 minutes. The heat employed should boil the water in not less than 25 minutes, and not more than 35 minutes." When the water boils the temperature of the milk is about 75 degrees, and rises till it meets the falling temperature of the water, attaining a maximum of 78 to 80 degrees.

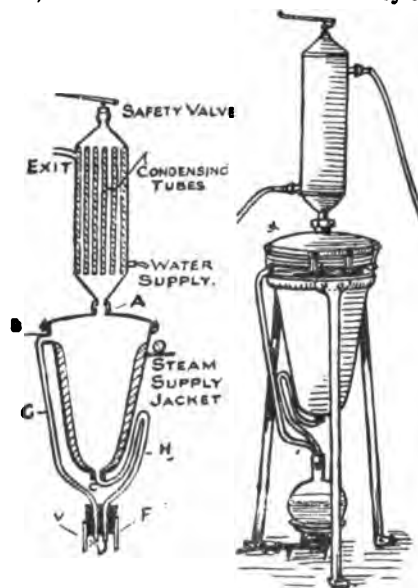
#### AN IMPORTANT POINT.

There is a further important point in connection with the sterilization of milk which I think has not received sufficient attention. When the milk is heated the separation of cream is much more complete, and the cream forms a more compact layer than is the case when the milk is merely allowed to stand at ordinary temperature. If the milk be treated in an open jar and not stirred, a tough skin forms on the surface, and such milk is impoverished by loss of fat in the removal of the skin, together with more or less of the cream adhering to its under surface. When a closed vessel is used for the milk this loss is avoided, but the cream is diffused with difficulty by stirring or shaking, and appears in small clots or flakes.

"As it is easier to prevent precipitation than to re-dissolve a precipitate once formed," so it is easier to prevent separation than to diffuse the cream once separated. The milk, therefore, should be frequently stirred while in the water bath and till its temperature is practically normal.

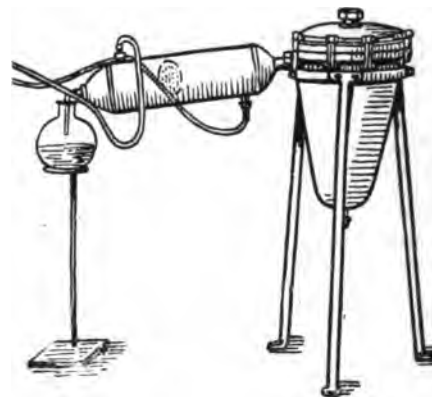
### A New Extracting Apparatus.

At a recent meeting of the Manchester Pharmaceutical Association J. H. Hoseason, Assistant Lecturer on Pharmacy at



Owens College, exhibited and described a convenient form of apparatus for the extraction of drugs by hot or cold solvents, and we reproduce a description and illustrations of the apparatus from *The Chemist and Druggist* of London. He said that the apparatus consists essentially of a jacketed copper percolator, tinned internally, with a tubular condenser. The lid of the percolator is fitted air tight by a vulcanized rubber band inserted between the rims and secured by clamps.

The screws at A and B, Fig. 1, are of the same size, so that the tubular condenser can be attached at either position. For the purpose of extraction the apparatus is arranged as in Figs. 1 and 2. The tubular condenser is attached to A by a nut, the joint being rendered secure by the insertion of a thin rubber or cork washer. To B is fitted a block tin tube, G, connecting the percolator with the receiving flask F, and from C a siphon tube, H, also of block tin, passes into the neck of the flask F; the lower end of the siphon tube H is fitted with a downward acting glass valve, V, to prevent the hot vapors ascending this tube. The following details give the principal dimensions of the apparatus: Condenser tubes, 18 inches long; diameter of condenser,  $6\frac{1}{4}$  inches; total length of condenser, 26 inches; depth of percolator, from level B to bottom, 20 inches; inside diameter of percolator at same level, 14 inches; inside diameter of bottom of percolator, 6 inches; center of the side tube G at B,  $1\frac{1}{2}$  inches below the lid rim. Prac-



tically, a rise of 6 inches has been found sufficient in the siphon tube H.

The percolator is prepared for use by placing a thin layer of absorbent cotton at the bottom and covering that with a thick sheet of filter paper. The powdered drug is then carefully and evenly packed in, a sufficiency of menstruum added, and maceration allowed to proceed for 24 hours, A being closed by a screw tap.

On application of an air force pump at A, the first percolate may be obtained without the aid of heat. By adding a quantity of fresh menstruum equal in volume to that already driven over, this process may be repeated if considered necessary. To thoroughly exhaust the marc, another portion of solvent is added, placing three fourths of the volume in the percolator and the remainder in the receiving flask F. The condenser is now attached to A, and heat applied to the flask F by a suitable steam or water bath. During the first few minutes the heated air contained in the apparatus should be allowed to escape by opening the safety valve. The solvent having been raised to the boiling point, the vapor passes up the tube G into the top portion of the percolator and is rapidly liquefied by the condenser. Percolation begins and the process becomes continuous. The boiling point of the solvent is lowered as the apparatus necessarily works under reduced pressure.

After extraction is complete the condenser is removed, and pressure by an air force pump applied at A, to remove as much of the solvent as possible. To recover the remainder it is necessary to remove the side tubes G and H, close A

\* *Pharmaceutical Journal*.

† *Pharm. Journ.* [3], xxiii, 263.

‡ *Pharm. Journ.* [4], i, 149.

and C by screw caps, and apply the condenser to B, Fig 8. On passing steam or hot water into the jacket distillation quickly takes place.

The use of such an apparatus is indicated where drugs have to be exhausted by volatile solvents, especially in plant analysis. It effects a great saving in solvent by preventing evaporation, and does away with the necessity of transferring the drug from percolator to still. By attaching an exhaust pump the apparatus can be used as a vacuum pan. It adapts itself to many other pharmaceutical operations—e.g., preparation of syrups, infusions, waters, hot filtration, simple maceration, percolation, etc. It may be used for the extraction of drugs by hot solvents where necessary (by keeping the percolator jacket steam or water heated), although that process is not a desirable one as a general rule.

### On the Assay of Cream of Tartar.\*

BY C. A. HILL, A.I.C.

Having been in the habit of determining the potassium hydrogen tartrate in "cream of tartar" by means of direct titration with alkali, and having found that this process gives accurate and trustworthy results, I have thought it desirable to bring these facts before the notice of pharmacists, not only because the method is far more convenient and expeditious than the ignition process recommended in the British Pharmacopœia, but also in order to notify the fact that the latter process is quite inaccurate, owing to the loss of potassium carbonate from reaction with the calcium sulphate which occurs in commercial "cream of tartar." The presence of calcium tartrate does not affect the result.

For the assay, about 1 gram of the substance is weighed out into a flask, and warmed with a slight excess of  $\frac{N}{5}$  soda.

The excess of alkali is then titrated with  $\frac{N}{5}$  sulphuric acid, phenol-phthalein being used as an indicator.

The following analyses show the composition of three commercial samples. The total calcium was determined, and the amount over and above that sufficient to account for the sulphuric acid was calculated as tartrate. In sample No. 1 the amounts of lime and sulphuric acid exactly tallied.

No. 1.	Per cent.
Potassium hydrogen tartrate.....	98.00
Calcium sulphate.....	4.20
	100.20
The value found by the ignition process was.....	84.50
Correction for 4.2 per cent. of calcium sulphate.....	11.61
	96.11

It will be seen that this corrected value agrees well with that found at once by the direct titration.

No. 2.	Per cent.
Potassium hydrogen tartrate.....	89.41
Calcium tartrate.....	10.58
	99.99

\* *Pharmaceutical Journal*.

The value found by ignition process was 89.85 per cent., showing that in the absence of calcium sulphate identical results are obtained by the two processes.

No. 3.	Per cent.
Potassium hydrogen tartrate.....	90.73
Calcium sulphate.....	2.48
Calcium tartrate.....	6.69
	99.89

Should free tartaric acid, or any other free acid, be present, the direct titration will of course include this. The sub-

stance should therefore be previously tested as follows:

About 2 or 3 grams of the substance is shaken up in a test tube with a few cubic centimeters of water, and the liquid filtered. A few drops of a strong solution\* of normal potassium tartrate, saturated with potassium hydrogen tartrate, are then added; when, in the presence of free tartaric acid, potassium hydrogen tartrate will be thrown down, both liquids being already saturated with this substance.

### Composition, Solubility and Characteristic Reactions of Antipyrine, Acetanilid and Phenacetin.

COMPILED BY A. GAWALOWSKI.\*

Trade name.....	Antipyrine	Acetanilid.	Phenacetin.
Synonyms.....	Phenyl-dimethyl-isopyrazolon, analgesine phenazone.....	Phenylacetamide.....	Para-oxyethylacetanilid. Para-acetphenetidin.
Formula.....	C <sub>11</sub> H <sub>9</sub> ON <sub>2</sub> .....	C <sub>9</sub> H <sub>9</sub> ON.....	C <sub>11</sub> H <sub>9</sub> O <sub>2</sub> N <sub>2</sub> .....
In cold water.....	Easily soluble 1 to 1.....	Soluble 1 to 180.....	Solution 1 to 1,500.
In alcohol.....	Very easily soluble.....	Soluble 2 to 7.....	Very easily soluble.
In chloroform.....	Very easily soluble.....	Very easily soluble.....	Very easily soluble.
One drop of HCl produces.....	Red color.....	No color.....	A yellow color.
Excess of HCl 2 to 1 with 1 drop of chloral water produces.....	No color.....	Corn-flower blue.....	First violet red then ruby red.
Diluted ferric chloride produces.....	A deep red.....	No color.....	An orange yellow.
Subsequent addition of H <sub>2</sub> SO <sub>4</sub> produces.....	A yellow.....	The yellowish tint of Fe, Cl <sub>2</sub> disappears.....	Decolorization.
Zinc alkaloid heated.....	Evolves gases smelling of H <sub>2</sub> S.....	Produces an aromatic odor.....	Produces a disagreeable vinegary odor.

\* Translated from the *Pharmaceutische Post* for the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

### Assay of Nux Vomica.\*

BY C. E. SMITH,

Brooklyn, N. Y.

During several years' experience in assaying this drug and its preparations a method has gradually developed which is believed to have some advantages over the others now in use, so far as the writer is familiar with them. Its chief recommendations are that accurate results can be obtained by it without much practice, being quite simple, and that it requires no more time and attention than other methods, which are expected to give only approximate results.

The underlying principles made use of are well known, and have been used for similar purposes before, but the arrangement of details is the outcome of considerable practice, and a number of changes were found necessary or desirable before the process assumed its present form, in which it has now given uniform satisfaction for nearly two years. In one feature it is merely a modification of Keller's method, which apparently was not designed for highly accurate work, but intended only as a rough guide for the pharmacist.

The method to be described consists in exhausting the drug with weak acetic acid, evaporating the acid liquid to dryness, dissolving the extract in a very little alcohol and ammonia, then shaking this once with a large quantity of ether and chloroform, and finally titrating the separated alkaloids. The following are the particulars:

Place 10 gm. of the powdered drug and 100 ccm. of 10 per cent. acetic acid into a bottle provided with a tight stopper, and

shake frequently during 12 hours. Filter the acid solution and wash the residue on the filter with cold water until the washings are tasteless. Evaporate the solution in a shallow vessel to dryness on a water bath. While still warm, add to the extract 6 ccm. of a mixture consisting of equal volumes of strong alcohol and 10 per cent. ammonia water, and rub them together by means of a rubber-tipped glass rod until a uniform thick syrup results. Transfer this to a separator containing 40 ccm. of ether and 45 ccm. of chloroform. Wash the extract still remaining in the evaporating dish into the separator with 6 ccm. more of the alcohol-ammonia, applying it in three or four successive portions. Cork the separator and shake vigorously for five minutes, then let it stand undisturbed for an hour. Filter the ether-chloroform solution through a small dry filter into a flask of about 200 ccm. capacity, washing the filter at the end with ether chloroform. Distill off the solvent on a water bath, dissolve the alkaloids in a little alcohol with aid of heat, and add a few drops of methyl-orange or hæmatoxylin solution. Then dilute with water and titrate with decinormal acid.

The value of weak acetic acid in the extraction of alkaloids is being more and more recognized, and it is peculiarly applicable here, because it admits of using the drug in a coarsely divided state—the condition in which it is most readily obtained for assay—without risk of incomplete exhaustion. Moreover, it dissolves comparatively little coloring matter, excludes fats entirely, and can easily

\* This reagent may be easily made by dissolving tartaric acid in solution of potash, and then adding tartaric acid till there is a precipitate of potassium hydrogen tartrate, and filtering.



be gotten rid of by evaporation, without in the least injuring the alkaloids.

Alcohol and ammonia, in the proportions given, make the best solvent for the extract remaining after evaporating the acetic acid, and answer equally well when the process is applied to the several alcoholic preparations of *nux vomica*. Only a little of this mixture is needed, and by keeping the volume of the alkaloidal extract low at this stage the next step of shaking out is much simplified, in that a single application of ether-chloroform is sufficient to withdraw the alkaloids completely, any tendency to emulsify being entirely obviated at the same time.

A mixture of ether and chloroform is preferable to chloroform alone, as it enables the isolation of the alkaloids in a purer state. These still contain about 5 per cent. of impurities, however, making estimation by weight impracticable. But by titration quite accurate results are obtained, if the indicator used is fairly sensitive, and the end reaction is not materially obscured by the small quantity of coloring matter present.

The ether-chloroform solution may be drawn from the separator and filtered just as soon as the dark-colored extract has risen to the top, but in that case filtration will be very slow from clogging of the filter by small particles suspended in the solution. It is better to let it stand one or two hours, or over night, before filtering.

The method has been found equally useful as a means of standardizing the galenical preparations of this drug.

### A New Method for Estimating Uric Acid.

In a recent communication M. Kreuger publishes (*Ztschr. für phys. Chemie* XXI, 1896) a method for the determination of uric acid which depends upon its precipitation and of the alloxin bases by copper sulphate in combination with sodium bisulphite, as follows: (No. 1) Heat 100 ccm. of the urine to be examined to the boiling point, add 10 ccm. of sodium hyposulphite solution and 10 ccm. of copper sulphate solution (18 per cent.); which causes a precipitation of the uric acid and of the nitrogenous alloxin bases. Then add 5 ccm. of a 10 per cent. solution of barium chloride, boil for three minutes, and then allow it to stand for two hours. Filter the liquid, wash the precipitate thoroughly with hot water, and determine the nitrogen contents by the Kjeldahl process. (No. 2.) The second step consists in adding sodium carbonate to 200 ccm. of the urine until a flocculent precipitate is produced, and then adding 5 ccm. of 10 per cent. acetic acid in order to set the uric acid free. Now add half a grm. of manganic oxide, prepared in a wet way, and boil moderately for a quarter of an hour. Neutralize with sodium carbonate and digest the urine with 10 ccm. of sodium bisulphite solution until the major portion of the manganic oxide is dissolved as manganous sulphate. Add 10 ccm. of the copper sulphate solution, 5 ccm. of barium chloride solution; boil for three minutes and allow to stand for two hours. Treat the resulting precipitate in the same manner as is directed under No. 1. This gives the nitrogenous alloxin bases, and the difference between the results of No. 1 and No. 2 processes will show the amount of uric acid present.

### Silver Salts in Pill Form.\*

By RAOUL R. D. CLINE,  
Houston, Texas.

Being one of those to whom the Texas State Pharmaceutical Association assigned the query, "What is the Best Method of Dispensing the Salts of Silver in the Form of Pills," I beg to submit the following:

To solve this problem necessitates a knowledge of the physical, chemical, and physiological properties of silver salts in general, and of nitrate of silver in particular. It also requires a knowledge of the probable metamorphosis of such salts after their introduction into the system, to which may become an astringent or styptic, constringing of the various liquids and secretions of the system.

#### SILVER NITRATE.

Silver nitrate being the salt generally used, I shall speak with reference to it in particular. It coagulates albuminoid substances, and when applied in its pure state to living tissue acts as a caustic, coating them with a white, almost membranous film, due to the formation, as is now conceded, of an albuminate of silver. This film prevents the caustic action from extending deeply into the tissues. Dilute this silver salt with a liquid or a solid menstruum, and it will lose in some degree its action, and from a caustic become an astringent or styptic, constringing the vessels and overcoming the relaxation.

#### ITS THERAPEUTIC EFFECT.

Dr. H. C. Wood attributes its beneficial effect not solely to its local action as an astringent, but likewise to its alterative effect upon the nutritive processes. If taken internally in sufficient doses it causes inflammation of the parts with which it comes in contact, and upon which it acts locally, and produces the various inflammatory conditions known as faucitis, laryngitis, gastro-enteritis, etc., but even then it is not without some systemic action.

In its systemic effect, by reason of its peculiar action on the nervous system, or rather centers, it resembles somewhat strychnine, whence its use in epilepsy. It is, however, especially useful in chronic inflammatory neuroses, and in its action on the liver, heart and kidneys, and even on the cells, it resembles the preparations of arsenic and antimony, influencing in a large degree the nutritive processes, and is therefore called an alterative, and like these last-mentioned substances, accumulates in the liver, which is its seat of predilection, and, like them, is chiefly eliminated by the liver, the intestinal glands and the sudipore system.

Dr. Begelowski has shown that the long continued use of silver salts (internally administered) produces loss of appetite, wasting of the tissues, slight lowering of the temperature, diarrhoea, decrease in quantity of urine voided, without an increase in the specific gravity, and often containing a large amount of albumen, decrease of percentage of urea in urine, and a proportionate increase of same in perspiration.

Post mortem examinations have shown it in the liver, and also in other organs, but especially in the liver. This fact, together with its appearance in the

cutaneous system, conclusively demonstrates that it passes into the circulatory system, either as an ammonio-chloride, a sodio-phosphate, or an albuminate of silver.

#### HOW IT ACTS

To solve this query, let us examine the various secretions, and, first, we find that:

Gastric juice is acid, contains pepsin, free hydrochloric acid, potassium chloride, sodium chloride, ammonium chloride, and phosphates.

Blood is alkaline, and contains chlorides of potassium and of sodium, sulphates of potassium and of sodium, potassium carbonate, phosphates of potassium and of iron, oleate, margarate and glycolate of sodium, urea, etc.

Gastric juice so acts on albumen as to produce albuminose, which is no longer precipitable by an acid, and which, chemically considered, possesses acid properties; and we know that as soon as a silver salt is introduced into the stomach, unless it be coated by some ingredient insoluble in the gastric juice (the salt having previously been put in pill form), it will be precipitated by the free muriatic acid as an insoluble muriate of silver (one of the most insoluble substances known), unless it then unites with the ammonio-chloride to form a soluble ammonio-chloride of silver. If to a precipitate of silver chloride we add the ammonia solution, the precipitate will dissolve readily, and if to the solution thus effected we add an acid in excess the silver chloride will reprecipitate; and these are the very conditions of gastric juice, thus doing away with any idea of the formation of an ammonio-chloride of silver.

A sodio-phosphate of silver, likewise soluble, may be formed and thrown into the circulatory system, but it is not decomposable by solar light, so that the only salt that is at the same time soluble, capable of forming in the gastric media, and also after arrival in the cutaneous system, susceptible of decomposition under the influence of solar light, is the albuminate of silver; all of which properties make this salt especially useful in photography, and explain the deposit of metallic silver in the skin, and producing what is commonly known as the "slate skin."

The foregoing being conceded, if we wish the local effect on the inside we must associate it with some ingredient that will prevent its systemic effect; and to accomplish this we add a medication having a specific action on the liver, that being the seat of accumulation, and we choose podophyllin. To obtain the maximum local effect, we use as an adjunct substances on which the silver salt has of itself no chemical action, and we choose kaolin, the whole to be bound together with solid extract of rhubarb (which extract the experience of the best physicians has shown to be especially beneficial). The pills being now made, if intended for internal use, may be coated with the following preparation:

	Parts.
Salol.....	5
Tannin.....	1
Ether.....	20

Or, they may be coated by dipping them in infused salol. One of these pills is to be given a half hour before eating.

On arrival in the intestines the salol coating is disintegrated, and the salol being of itself an antiseptic and antisymp-totic, very probably becomes a salicy-

\* Read before the Texas State Pharmaceutical Association, and awarded the prize of a Dispensatory offered by President H. L. Carleton.

late with formation of phenol or of a phenate, thus destroying the cause of the morbid condition of the tissues, such diseased tissues being themselves destroyed by the silver salt, free to act after disassociation above mentioned, and the podophyllin and extract of rhubarb now do their part in aiding and inducing the system to throw off the excess of silver salt from the intestines and from the liver, thus diminishing the liability of passage into the cutaneous system, and preventing that little-desired slate skin, as well as reducing to a minimum the systemic effect of the salt, which, under the circumstances, would be detrimental.

### The Chemical Analysis of Water.\*

BY HERBERT E. DAVIES, M.A., B.Sc., F.I.C.

Within the memory of people still living water analysis was a thing unheard of. If a water supply were reasonably clear, sparkling, and free from bad taste, people asked for nothing more, and those who objected to a well sunk directly beneath a crowded churchyard or surrounded by cesspools were regarded as eccentric faddists. Cholera and other epidemics, which swept away thousands of victims, were regarded as visitations of Providence, to be received in a spirit of humility, and it took a long time to persuade the conservative English mind that a bad water supply and various diseases are cause and effect. It was only after years of persistent teaching of the necessity for pure water that the lesson was learned, and much of the credit for the vastly improved state of things is due to the many eminent chemists who have devoted their best energies to devising means for distinguishing between good waters and bad. Water analysis is a peculiarly English branch of science. All the standard methods have been devised by English chemists, such as Wanklyn, Frankland, Armstrong, Clark, Tidy and others, and it is in the English-speaking countries that water analysis is chiefly practiced. It is only necessary to consult a Continental work on hygiene to see how very much behind us they are in this respect, and how small a part water analysis plays. The result is seen in the cholera outbreaks at Hamburg, where the water supply was a disgrace to a civilized community.

In the early days of water analysis the examination was confined almost exclusively to the mineral constituents, and according to the amount of the various salts found, some rough classification of waters could be made. And even now, if we are making an analysis for manufacturers, it is the mineral salts which determine the suitability of the water, because, if a water is to be used, for example, in a boiler, the presence of organic impurity does not matter, whereas an excess of lime salts will be very injurious.

#### FIRST GREAT ADVANCE IN WATER ANALYSIS.

The first great advance in water analysis occurred about 1867, when Wanklyn on the one hand and Frankland and Armstrong on the other devised their respective processes for estimating the amount of organic matter in water. It is obvious that the suitability of a water

from a hygienic point of view can only be determined by estimating in some way the amount of organic matter in the water, because, whether we regard zymotic diseases as caused by micro-organisms or by some poisonous product of living matter, the cause of the disease will be present in the water as organic matter.

A most deplorable personal quarrel arose between the originators of the two methods. Unfortunately, their insistence upon their particular method only being necessary to get all the information requisite to judge of a water caused very bad blunders, and to this is due much of the contemptuous reference to mere chemical analysis and its inability to detect pollution.

To see how far we have advanced from the day when a chemist would confidently pass judgment on a water after determining the free and albuminoid ammonia, I propose to point out the methods adopted nowadays by a competent chemist who is called upon to decide about the purity or otherwise of a water. The whole of the methods are not employed in every case—people cannot expect to get more than they will pay for, but if a complete examination be made it would be on something like the following lines:

#### HOW SAMPLES SHOULD BE TAKEN.

In the first place, it is an advantage to have the sample taken by a person who knows what he is about. Every analyst has water sent to him at times in dirty wine bottles or stone jars—which may or may not be clean—sometimes closed with a rotten old cork or even with a plug of paper. If the cork be too small, it is easy to remedy that, in some people's opinion, by wrapping a bit of rag round it, and so on. The first considerations should always be the scrupulous cleanliness of the vessel in which the water is to be carried, and obtaining a fair representative sample of the supply in question, avoiding accidental impurities. It is important also to notice the source of the water; if a well, whether it be shallow or deep, whether there be any possible source of pollution near at hand, and so on. It is curious to note how very reluctant people are, as a rule, to give any information at all about a sample. They seem to think that the analyst ought to find it out for himself, and that they are being in a manner defrauded if they give him any assistance.

#### PHYSICAL PROPERTIES.

When the sample is taken it is as well to proceed with the analysis without much delay, because, in warm weather especially, the organic matter is liable to undergo alteration. In the general examination of water we deal first with the color, as determined by viewing it in a 2-foot tube against a white background. Generally speaking, there is a distinct brown color with a decided green tinge. This is due to vegetable matter dissolved in the water, and when the supply is from a peaty soil, what is known as "upland surface water," the color may be very deep indeed, as peat gives much soluble matter to the water. The London water examiners have a graduated scale of tints, but in an ordinary way it is sufficient to note that there is a light or deep tint, as the case may be. Clearness or turbidity is noted as determining the efficient filtration of the water. When water contains much sewage there is a peculiar opalescent appearance, which is very characteristic. The taste and smell are noted, though

this does not, as a rule, give much information, because a badly polluted well water is often very palatable. However, if there should be any unpleasant smell, it may be taken as almost certain that the water is polluted. It is best to warm the water slightly in an open dish to detect any smell there may be.

#### THE REACTION.

It should be noted whether the water is acid or alkaline. This is best observed with methyl orange. In the great majority of cases water is faintly alkaline owing to the dissolved carbonate of lime. An acid reaction generally points to pollution with manufacturing waste.

#### MICRO ORGANISMS.

In the general examination may be included the microscopical examination of the residue. This should never be neglected, because it often affords most valuable information. The water is allowed to settle for some hours, and then is carefully decanted or syphoned off until about 50 ccm. are left. This is then well shaken round in the bottle, and poured into a conical glass, and again allowed to settle. A drop is then taken with a pipette from the bottom and examined. As there may be anything from micrococci to small fishes, a wide experience in microscopical work is required to enable the observer to come to a right conclusion from what he sees. There are certain organisms which are peculiarly characteristic of sewage pollution, and others, again, which are only found in pure spring waters.

#### THE INORGANIC CONSTITUENTS.

We now come to the real chemical analysis of the water, and here it may be noted that results of an analysis are expressed in grains per gallon and parts per 100,000—a difference which is a most regrettable difficulty to analysts and their clients, as much confusion arises owing to people getting different sets of figures.

The total dissolved matter is estimated by evaporating a known quantity of the water to dryness, and weighing the residue. At one time it was thought that the amount of organic matter could be determined by igniting this residue and finding how much weight was lost by the ignition, but during evaporation we drive off some of it, and combined water nitrites, nitrates and carbonates are decomposed, and some chlorides are volatilized, so that it is quite fallacious to consider the loss as organic matter. The amount of dissolved matter varies between 10 gr. to the gallon and 150. It is impossible to say that any particular number renders a water fit for use or the reverse, because a water may contain a large amount of dissolved salts and yet be very pure organically, and *vice versa*. This consideration applies to most of the constituents. In many popular books on water analysis we see tables divided in three columns giving the amounts of the various constituents which render a water safe, usable and dangerous. Such tables are worthless and misleading.

#### THE ORGANIC MATTER.

We have now to consider the determination of the organic matter. There are three methods in use—namely, Wanklyn's ammonia process, Frankland's combustion process and Tidy's permanganate process. The first mentioned is the most generally employed. In it half a liter of the water is placed in a clean retort and distilled with carbonate of soda, and the ammonia in the distillate estimated

\* Abstract of a paper communicated to the Liverpool Chemists' Association.

with Nessler's solution. Alkaline permanganate is then added, and a further quantity of ammonia distills over. This is the albuminoid ammonia. The first lot of ammonia is called free or saline ammonia. It is derived from the ammonium salts in the water and any urea there may be. The object of adding carbonate of soda is to liberate ammonia from the ammonium salts, and it is a curious fact that many books on water analysis omit all mention of it. Another mistake, which one writer copies from another until it has become accepted as perfectly true, is that if the first 50 ccm. of the distillate be tested the amount of ammonia found is two-thirds of the whole quantity of free ammonia. I have found this statement to be altogether untrue. Free ammonia in a water is derived from organic matter, and is a measure of the amount of organic matter which has undergone change.

If sewage or other matter of a like kind gets into water the ordinary putrefactive bacteria decompose the organic matter with formation of ammonia, and the nitrifying organisms carry on the change further, giving rise to nitrous and nitric acid. Therefore much free ammonia is very strong evidence of sewage contamination. The albuminoid ammonia is derived from the unchanged organic matter. It has been found that if organic matter, such as white of egg, be boiled with a strongly alkaline solution of potass. permanganate, a great part of the nitrogen in the organic matter is converted into ammonia. Therefore free ammonia is a measure of the decomposed organic matter in the water, and albuminoid ammonia is a measure of the unchanged organic matter. Two objections will be at once raised. First, how can you tell whether the organic matter is harmless vegetable matter or dangerous animal matter? Well, it is a curious fact that vegetable matter gives rise to very little free ammonia, and a practiced hand can also distinguish by the manner in which the albuminoid ammonia comes off. It comes off much more slowly and more regularly. But the most important means of distinguishing them is this, that animal matter is always accompanied by chlorides and nitrates, whereas vegetable matter is not. The second objection is that, although we can tell how much ammonia there is, we do not therefore know how much organic matter there is. The answer to this is that it does not matter in the least. Long experience has shown that, other things being equal, a certain amount of free and albuminoid ammonia respectively denote a pure water, while beyond certain limits there has been pollution; and if a water has been polluted by sewage it really does not matter much whether there is an ounce of it or a pound of it in a gallon. The water is equally unfit for use in either case.

#### FRANKLAND'S METHOD LOSING GROUND.

Frankland's method of estimating the organic matter is supported by influential analysts, but, all the same, its days are numbered. It requires elaborate and delicate apparatus, much time and great skill; but the fatal objection to it is that there are unavoidable sources of error in it which make it quite unreliable. Proof of this has been given lately. It has been shown that when the most eminent chemists analyze the same water their results may differ by more than 100 per cent., and quite a different decision be arrived at. The method, stated briefly, consists in evaporating a large volume of the

water to dryness and then making an organic combustion of the residue with copper oxide. From the amount of CO<sub>2</sub> and N found, it is supposed that the amount of organic matter can be calculated, and from their relative amounts whether it is animal or vegetable. It would take too long to explain the various sources of error; it is sufficient to say that nothing but Frankland's great influence and official position keep the process alive. I have never heard of it being adopted outside England, whereas Wanklyn's process is used all over the world.

Tidy's permanganate process consists simply in measuring the amount of permanganate decomposed by the water; but as other substances besides organic matter decompose permanganate, much reliance cannot be placed upon the results obtained.

Closely related to organic matter are chlorides and nitrates. Nitrates are derived from the oxidation of organic matter by means of the nitrifying organisms which swarm in the upper layers of the soil. Therefore, if we find much nitrate in a water, it is certain proof that it has been polluted with organic matter, and, moreover, with animal matter. Until recently it was thought that if the organic matter had been converted into nitrates it was evidence that the water had become so completely oxidized as to be safe, but research has shown that under favorable conditions nitrification may go on so rapidly that, while nearly all the organic matter is converted, disease germs still retain their vitality.

#### THE IMPORTANCE OF CHLORIDE DETERMINATION.

The determination of the amount of chlorine in the form of chlorides is a most valuable guide. Urine and sewage generally contain a large quantity of sodium chloride, and no treatment to which the sewage can be submitted will remove it; therefore the presence of a large quantity of chlorides in a water is a most decisive proof of sewage pollution. Of course, it must be remembered that in certain cases—e.g., near the seashore or in places like the Cheshire salt district—there will naturally be a large quantity of chlorides in the water; but whenever we find more chlorides than the normal amount, accompanied by nitrates, and high free and albuminoid ammonia, we can say with certainty that the water has been polluted with sewage.

Sublimation and Distillation in Shop Bottles.—On the interior of shop bottles containing volatile substances, either solid or liquid, there will frequently be noted a deposition which in the case of solids is generally crystalline in character, the liquid of course consisting merely of aggregations of small drops. On turning the shop bottle around this will disappear. Eliesegang has observed (*Naturwissenschaft-Wochenblatt*) that the condensation is not necessarily on the side of the bottle which is coolest; that therefore it is not merely the influence of heat to which this phenomena is due, and careful observation has proven that the deposition takes place upon that portion of the container upon which the greatest amount of light falls. This is true whether artificial light or natural sunlight be brought to bear upon the container.

#### Queries from the Scientific Section of the A. P. A.

The committee of the Section on Scientific Papers, consisting of S. P. Sadtler, chairman; W. C. Alpers, secretary, and L. E. Sayre, associate, have published the following queries or suggestions for papers to be presented at the next meeting of the association:

1. Sanguinaria. The liquid preparations slowly deposit a precipitate upon the sides of the containers. Can a menstruum be devised which will hold permanently in solution the soluble constituents?

2. Gelatin Capsules. What general rule should be adopted in compounding prescriptions ordering gelatin capsules? When should ingredients be dispensed in dry powder, and when is it preferable to form them into a mass?

3. Ichthyol is now being used internally, dissolved in water and other media. A palatable form of administration is wanted.

4. Salol and Acetanilid are given usually in powder form. Cannot formulas for therapeutically unobjectionable liquid preparations of the same be devised?

5. Salicylic Acid. It has been alleged that the synthetical salicylic acid now in the market occasionally shows the presence of salol. Is this statement correct, and if so, to what extent?

6. Formalin. A 40-per cent. solution of formaldehyde under that name is attracting much attention as an antiseptic and deodorizer. A good practical formula for its preparation by the retail pharmacists is wanted.

7. Kamala. It is supposed that resin is the active constituent. Investigation recommended. Is a tincture advisable?

8. *Pyrethrum carneum*, *Pyrethrum roseum*, and *Pyrethrum cinerariifolium*; Insect Powder. Can it not be used as a medicine? On what depends its insecticide properties?

9. *Veronica officinalis* is used largely as a house remedy for pectoral complaints and skin diseases. Is there any alkaloid or other active principle in the plant to warrant such use?

10. *Viscum album* (Mistletoe) is used by practitioners to arrest post-partum and other uterine hemorrhages. Investigation invited.

11. Pichurim Beans. What are they? Various descriptions of their oils are given by different investigators.

12. *Strophanthus* Seeds. A determination of the active principles in the seeds of commerce, their nature, quantity, and method of valuation.

13. Pareira. Pareira is a valuable diuretic and tonic drug. Buxine has been found in it, but this can hardly be the important principle. What is it?

14. Rhus. What is the really potent principle of the rhus group? Is it a volatile acid, as claimed by Maiesch, or is it a substance resembling cardol?

15. Tannin. At what season of the year should the tannin drugs be gathered? What relation does the amount of tannin present bear to that of starch? Does the tannin increase as the starch decreases? Or is this true of some drugs, but not of others?

16. *Cypripedium*. There appears to be a poisonous principle, producing effects similar to those of *Rhus toxicodendron*, in the glandular hairs of some *cypripediums*, particularly *C. spectabile*. What is this principle?

17. *Iris*. The rhizomes of many species of *Iris* abound in starch, as the species that furnish the orris root of commerce, but the rhizomes of *Iris versicolor* and of the *Iris pseudo-acorus* do not turn blue with iodine solution. What is the carbohydrate present?

18. *Veratrum*. By what means may the rhizomes of *Veratrum album* best be distinguished from those of *Veratrum viride*? Some method is desirable by means of which this may be done easily and with certainty.

19. *Aconites*. The different *aconites* are very liable to be confounded. In the case of drugs so potent it is exceedingly important that the structure of each specie liable to be gathered or sold for the official should be carefully described. Some one should undertake the task of the thorough investigation of the microscopical structure of all the species.

20. *Pepsin test*. A discussion of the variable results obtained in the tests.

21. *Cottonseed Oil*. A review of the tests for its presence as an adulterant in other fixed oils.

22. *Cod-liver Oil*. Are the official tests sufficient to distinguish a pure cod-liver oil? If not, what additional ones should be adopted?

23. *Methyl Acetate*. Write a paper on the possible use of methyl acetate as a solvent in pharmacy.

24. *Sodium bisulphite* of commerce is rarely found more than one-fourth the strength required by the U. S. P. Is the official standard too high, or does this salt rapidly deteriorate on keeping?

25. *Terpeneless volatile oils* are now articles of commerce. Are they liable to deteriorate on keeping? How much stronger are they than ordinary volatile oils?

26. *Lard oil* appears to be grossly adulterated. Is it possible to obtain lard oil in the open market of the standard of purity of the U. S. P.?

27. *Guaiacol*. According to Dr. Squibb, commercial guaiacol varies in purity from 50 to 90 per cent. Cannot some process be devised for its assay and purification, if necessary?

beef, iron and wine, malt extracts, or Elixir Calisaya. Malt liquors, strictly so-called, Vin Tokay and Duffy's Malt Whiskey, are, however, among the articles likely to come under the ban of the Commissioners of Excise, and it may be necessary to take out a special license for their sale.

### Dressing for Russet Leather.

- |                                |         |
|--------------------------------|---------|
| 1.—Soft Soap.....              | 2 parts |
| Linseed oil.....               | 8 parts |
| Annatto solution (in oil)..... | 8 parts |
| Beeswax.....                   | 8 parts |
| Turpentine.....                | 8 parts |
| Water.....                     | 8 parts |

Dissolve the soap in the water and add the annatto; melt the wax in the oil and turpentine, and gradually stir in the soap solution, stirring until cold.

- |                  |          |
|------------------|----------|
| 2.—Palm oil..... | 16 parts |
| Common soap..... | 48 parts |
| Oleic acid.....  | 32 parts |
| Glycerin.....    | 10 parts |
| Tannic acid..... | 1 part   |

Melt the soap and palm oil together at a gentle heat, and add the oleic acid; dissolve the tannic acid in the glycerin, add to the hot soap and oil mixture, and stir until cold.

- |                        |          |
|------------------------|----------|
| 3.—Oil turpentine..... | 20 parts |
| Yellow wax.....        | 9 parts  |
| Common soap.....       | 1 part   |
| Boiling water.....     | 20 parts |

Dissolve the wax in the oil with the aid of the water bath, and the soap in the water; mix the two solutions in a hot mortar, and stir until cold.

### Roach Exterminators.

#### POWDERS.

- |                                |          |
|--------------------------------|----------|
| 1.—Wheat flour.....            | 2 parts  |
| Powdered sugar.....            | 4 parts  |
| Powdered borax.....            | 1 part   |
| Unslaked lime.....             | 1 part   |
| Keep dry.                      |          |
| 2.—Powdered borax.....         | 37 parts |
| Starch.....                    | 9 parts  |
| Cocoa.....                     | 4 parts  |
| 3.—Plaster of paris.....       | 2 parts  |
| Oatmeal.....                   | 4 parts  |
| Sugar.....                     | 1 part   |
| 4.—Powdered angelica root..... | 5 parts  |
| Essence eucalyptus.....        | 1 part   |
| Mix well.                      |          |

#### PASTES.

- |                                 |                 |
|---------------------------------|-----------------|
| 1.—Phosphorus.....              | 1 part          |
| Warm water (70 degrees C.)..... | 16 parts        |
| Molasses.....                   | 8 parts         |
| Suet or lard.....               | 16 parts        |
| Oatmeal or flour.....           | to make a paste |
| 2.—Red lead.....                | 1 part          |
| Indian meal.....                | 2 parts         |
| Molasses.....                   | to make a paste |

### More Incompatibles.

*Formalin* is incompatible with ammonia, the alkaline bisulphites, and reduces alkaline metallic solutions, and gelatin becomes insoluble through its action.

*Iodophenin* is decomposed by water, liberating iodine. As it readily parts with its iodine, it should not be mixed with any body which has a strong affinity for that metalloid.

#### A Life Subscriber.

I am very much pleased with the DRUGGIST AND RECORD, finding in its contents much to interest as well as instruct. I shall continue a subscriber as long as I am in the business, which probably means the balance of my life.

H. TOWNSEND.

HARTFORD, CONN., April 9, 1896.



*We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.*

*When sending for the formula of any unusual compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the labels used on packages of the compound should also be sent.*

**Book on Flavoring Extract.**—H. Z.—You will find Harrop's "Monograph on Flavoring Extracts," published by Joseph Harrop, Columbus, Ohio, of considerable utility. It contains numerous formulas for essences, syrups and colorings, with directions for their preparation.

**Salol Not Miscible with Water.**—M. D. C. asks if the following prescription can be compounded as a presentable mixture. The prescription reads:

Sodii salicylati.  
Salol.....ss ʒ j  
Syrup. simp.  
Aque.....ad. ʒ iij.

Salol is insoluble in aqueous menstrua and its density is such as to prevent its being fairly suspended in a watery mixture. The substitution of mucilage of acacia for the syrup will enable you to send out a satisfactory mixture, but this cannot of course be done without the consent of the prescriber.

**The Sale of Alcohol by Druggists.**—Dr. S. E. P.—No license other than a United States Revenue license seems to be required for the sale of alcohol by a registered pharmacist. Subdivision 3 of the Raines liquor tax law expressly exempts alcohol in the following words:

"Nothing in this subdivision shall be construed as prohibiting the sale without prescription of alcohol to be used for medicinal, mechanical or chemical purposes." The question has not, however, been ruled upon by the State Commissioner, and some, among others, Dr. A. B. Heustet of Albany, believe that either a storekeeper's or a pharmacist's license will be necessary to enable one to sell alcohol. We do not believe it is the intention of the commissioners to exact a license for the sale of alcohol, in addition to the United States Revenue tax.

**Articles Affected by the Raines Law.**—H. H. B.—Would like to know how the Raines law affects the sale of the articles named in the following list:

Hostetter's Bitters.  
Atwood's Bitters.  
Malt Liquors.  
Vin Mariana.  
Vin Tokay.  
Malt Extracts containing Alcohol.  
Best Tonic.  
Beef, Iron and Wine.  
Elixir Calisaya.  
Duffy's Malt Whiskey.

It is extremely improbable that the executive authorities will interfere with the sale by druggists of medicinal preparations like Vin Mariana (wine of cocoa),



### Statement from New England Retail Druggists' Union.

Editor AMERICAN DRUGGIST:

Please publish inclosed "open letter" entire in your next issue, as it is very important. Many interested are waiting for information as to the present position of affairs, and I have not been able to make a statement till this time.

Yours cordially,

C. P. FLYNN, Secretary.

Boston, April 22, 1898.

AN OPEN LETTER TO THE MEMBERS OF THE NEW ENGLAND RETAIL DRUGGISTS' UNION AND ALL PHARMACISTS WHOM IT MAY CONCERN:

The New England Retail Druggists' Union has endeavored to put an end to the evils of "cutting" in New England. We believed these evils were grievous in their effects, and that they should be stamped out.

We hoped that all interested, proprietor, jobber and retailer, would, when we got thoroughly to work, support our efforts.

We first asked support of the jobbers of New England, and while some of them pledged themselves to assist us, there were others, notably in Boston, who gave the matter a cold reception, and refused to encourage us. But finally even these deemed it wise to join us, and they did so one day, and were in a hurry about it. Then we got practically all the jobbers of New York to come to our support. At this time there appeared to be only two cutting firms of any consequence holding out against us in New England, and it was understood the others would be with us when we were ready, and we felt that if our jobbers in New England would stand true to us we could settle the question in a short time.

But we found out almost immediately that some of the jobbers were breaking their pledges, and supplying these two cutters with goods, in a roundabout way. In the meantime a canvass was being made of all the retailers within a large radius of Boston to get their consent in writing to abide by a uniform schedule, and to find out just who were opposed to the plan. We then found there were seven retail firms who would not enter a schedule, and we were therefore compelled to notify all the jobbers to this effect.

Some of the Boston jobbers began immediately to show signs of opposition, and our last friendly list did not contain the names of two Boston firms. It was understood at this time that one of these firms had stated that if the friendly list went out certain means would be taken to force all the wholesalers from the list.

Although this did not then seem possible, yet we regret to say that practically all the wholesale druggists of New England have since withdrawn, by concerted action. The methods pursued to force this end are said to have been of an intimidating nature, with threats of disruption in the jobbing business, of ruinous competition, and of many other things of a similar nature.

The result is that there appears to be no wholesaler who desires or has the courage to stand by us.

The officers of the union have worked as earnestly as they could, and at a great deal of sacrifice, to sift this problem thoroughly and to get a lasting good out of it if possible.

They cannot see that much has been left undone.

Had all the wholesalers been really loyal and sincere, we should have succeeded as well as could be wished. They said, "Get your organization, and you will not have to come to us; we will go to you."

We got our fine organization and asked them to act with us, and they deserted us in our time of greatest need.

You see the wholesalers do not like cutting in their business, and they believe in keeping the wholesale trade united for their own profit, even if be at your expense. They want your patronage, the patronage of the cutter, and their rebate also.

Of course we cannot cope, on present lines, against the combination of the wholesalers and cutters, but I trust that the union will be kept up, and all local associations also. Much good can be done, and we can honorably maintain a uniform schedule and keep in touch with

each other, so as to be ready to take united action when the time comes.

I believe our salvation now lies in having our own wholesale plant. Druggists in New England buy \$15,000,000 worth of goods annually, and support 25 jobbing houses.

Why not have our own jobbing house? I would recommend the retailers, if they wish to save the union, to pay the small annual dues to Treasurer Sawyer at once.

It is proper to state that the committee have decided to release all those left on the friendly list from any further obligation.

The writer takes this opportunity to extend a cordial greeting to those loyal retailers of New England who so well have stood by the officers in their efforts, and he also thanks the pharmaceutical press for their many courtesies and kind words of encouragement.

Respectfully,

C. P. FLYNN, Secretary, N. E. R. D. U.  
Boston, April 22, 1898.



### Advertising Aid, how, when, and where to Advertise.

PRACTICAL HINTS AND SUGGESTIONS. CRITICISM AND CONSTRUCTION OF ADVERTISEMENTS.

In Charge of Ulysses G. Manning.

The department editor will be pleased to criticize any advertisements submitted and to suggest improvements. Questions answered and advice given. Our readers are cordially invited to avail themselves of this help.

#### SPRING ADVERTISING.

SPRING is one of the seasons of special trade. Business ought to be better the next two or three months. Improvement is already noticeable in many parts of the country. Seasonable things ought to be pushed now. The demand for house cleaning drugs is at hand. The demand can be stimulated by proper advertising. Camphor, moth balls, ammonia, borax, sal soda and disinfectants can be advertised. Fruit tree spraying is becoming general, and the druggist should advocate it, and advertise the materials.

Spring medicines must be pushed now or never. It will soon be time to start in on soda water. Commence advertising it early and keep it up.

Paints are in season, and many druggists handle seeds and wall paper. Don't waste space by letting your ads. run two or three weeks these days. Change often and advertise seasonable goods.

#### Criticism and Comment.

TRADE CIRCULARS.

OFFICE OF DEEP ROCK SPRING COMPANY, OSWEGO, N. Y.

ULYSSES G. MANNING.

DEAR SIR: Complying with your offer in the AMERICAN DRUGGIST, I inclose two circulars for your criticism. One is intended for the drug trade and the other for private family use, both to be distributed through the mails.

Awaiting your reply with interest, I am,

Yours truly,

DEEP ROCK SPRINGS COMPANY, M.

These circulars are eight-page folders, printed in two colors, and are similar in size and appearance. They are too much alike. A circular to the trade and one to the public can hardly be constructed on the same lines and be equally effective.

This one to the trade should answer pretty well. It presents one good argument. It presents it on the second page, in concise form. Druggists will read that far, but I don't believe they will read much further. It hardly matters whether they do or not. You have won or lost your case on the second page. Had the matter following been condensed and the space used to elaborate your argument, to present new points bearing on the money making features



of Deep Rock, I think the circular would have been improved. The circular to the public could be improved in a good many ways. It is as good as the average mineral water circular, but this is not saying a great deal. There are two classes of people to be reached and influenced by such a circular—those who already use mineral waters, and those who might use them if they were given the right sort of information. All the circulars I see are directed toward the first class. The writers do not start with any such intention, but they are hampered by a too intimate knowledge of the subject. They give the public credit for knowing more than it does about the nature and action of mineral waters. Their circulars appeal, therefore, to those who have from friends or physicians, or by experience, picked up information on the subject—information that the mineral water men should be disseminating.

#### MINERAL WATERS SHOULD BE ADVERTISED.

Nine tenths of the people never use mineral waters. They use a lot of things that cost more and do less good. There is a large undeveloped field here that it would seem the mineral water man might occupy. He will never occupy it until he tells people, simply and entertainingly, all about his mineral water—something of its history and success; tells just what it does and how it does it, supplemented by arguments worthy of the theme.

The two circulars under criticism are well printed, on good stock, but they struck me as not being good enough. Deep Rock is a valuable and popular water. The printed matter ought to convey the impression that it is the leading one. The general appearance of the printed matter often carries more weight than the argument. I particularly object to the illustrations in these circulars. They are poorly conceived and crudely executed.

These allegorical pictures of an afflicted throng, including one-legged men, rushing to the healing fountain, to go away—presumably—with health restored and new legs, are too primitive for these matter of fact days. Such cuts are apt to excite derision, where a few dainty half tones of actual scenes about the spring, or of the stock of bottled and barreled waters ready for shipment, would have helped the text and made the circular attractive.

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#### A GOOD ADVERTISING PAPER.

Eli T. Hosmer, Buffalo, N. Y., sends a copy of the first issue of *Hosmer's Drug News*, a little paper for local distribution similar to others that have been reviewed in this department. Mr. Hosmer states that results have been quite satisfactory for the first issue.

The paper is well gotten up, and will doubtless do good. It contains a continued story, a column of clippings, household recipes, bargain list, and the advertisements of Mr. Hosmer's special preparations. Some of the ads. would be improved were a little more information given as to the preparations advertised. Aside from this, I see nothing to criticize.

\*\*\*

Dana S. Carpenter, Middletown Springs, Vt., asks that his Grip Cure booklet be criticised.

The fault of this booklet is that it

rambles too much. It sounds as though the writer had no definite idea of what he wished to say. I take this from one of the pages:

### The Taste

Carpenter's Grip Syrup has the taste of Spike-nard, Wild Cherry, White Pine and Balm Gilead Buds, which it contains all in perfect solution. It is not sweetened with "Nigger-toe" molasses, which may be good for some purposes, but is not calculated to soothe an inflamed throat. Ours contains Glycerine and Rock Candy Syrup. There are lots of cough medicines in the market. You can buy them at every drug store, and at almost every grocery store, and occasionally even where you buy your shoes. Perhaps you have had some of them; once in a while a good one. Maybe the price is 67 cents or 81, but you don't begrudge the price if it cures that hard cold or weary cough.

The writer may have known just what he was driving at, but I do not, and the context does not enlighten me. We can infer several things, but can hardly be sure of them. In endeavoring to write entertainingly clearness has been sacrificed. I do not believe this booklet can be very effective. I say this without knowing what it may have accomplished; but I am certain that, whatever it may have done, it would have done more had the points been clearly and definitely stated.

Carpenter's Grip Syrup tastes good. It contains Spike-nard, Wild Cherry, etc. They are all pleasant to the taste. The remedy contains glycerine and is sweetened with Rock Candy Syrup. It not only tastes good, but it does good. There are a lot of cough medicines on the market—too many of them, in fact. You can buy them at drug stores—and certain kinds at other stores, for some are made to sell rather than to cure.

Carpenter's Grip Syrup is sold by druggists only. It is a remedy that cures. You must go to the druggist for such remedies.

The above is an off-hand attempt to follow the booklet a little way, stating things plainly, as I understand them. It could probably be stated more concisely and clearly, but may serve to illustrate the plan of shooting out your ideas, one at a time, in short sentences. It is not an easy matter to write clearly. No one is always at his best, and the critic is as liable to stumble as the rest of them. However, the proper way to write a booklet, an ad., or anything else, for that matter, is to have a definite plan before you begin. Set down the points you want to make, arrange them in logical order, and then begin. If you have a clear idea of what you have to tell, and know just where it is to be told, you will not go far astray.

#### CUTS GONE WRONG.

Mr. Carpenter's booklet also contains examples of cuts gone wrong. The illustrations used are grotesque, irrelevant, and weaken rather than strengthen the argument. The effort to make a place for them is too apparent. For instance, one cut represents a boy executing a war dance after having stepped on a branch of thorns. The cut is labeled "tack on," while the context says: "There are some medicines for which you pay more, but they are worth no more. They simply tack on a bigger profit." The cut represents a case of "thorn in," not of "tack on." It deprives a good argument of all its force and turns it into a howling farce.

BROCKTON, MASS.

EDITOR DEPARTMENT OF BUSINESS HINTS.  
DEAR SIR: Inclosed find eight samples of our ads., to comment on or criticize or utilize as you see fit. They have already appeared in our local paper, on fourth page next to reading matter. We file all our ads. as they appear, marking the date on each, so that if desired they can be utilized again the following year. We

take pride in our ads., and they sell goods. We attempt to be original, but it is a hard thing to do, as we are all inclined to borrow other people's ideas, twisting and turning them so as to suit our purposes. Our ads. are the talk of the city. We use a 3-inch space, changing sometimes every day, and sometimes every other day. We own our own borders, and therefore always have something different from the rest.

All our ads. are written by F. O. R., who takes great interest in advertising as a study. The black mortar and pestle we have used since 1890. The one with the owl is our 1895 design. Ads. inclosed are a few of our different styles. We have others, better than these, that we will send later if of interest to you.

FRANK O. RANDALL & Co.

The best one of Mr. Randall's ads. is reproduced here. The special borders and the simple but effective display employed make attractive ads. I have no doubt that, in spite of the small space occupied, these ads. are very conspicu-

### Cheap Drugs Are Dear Taking.

It is all well enough to economize on hair pins and collar buttons, but when you come to economizing on your health it's poor economy. Buying cheap drugs is like sliding down from an eight-story window on a straw rope. Our drugs are the purest and best you can buy. If you are buying drugs to take, the best are the cheapest. Remember who's talking, Frank O. Randall & Co., Druggists. Only three minutes north of the post-office, Linden block. Don't forget that Nox-Em All Centennial Calendar we have for your asking.

ous. It is the sharp contrast between the headlines and solid matter that makes the ad. stand out. Mr. Randall uses larger headlines in most of his ads., and this effect is still further increased. Though nearly 100 words have been crowded into a 3-inch space, the ad. still looks readable.

This ad. may serve as a model for some who wish to have a distinctive style of display. As a rule, however, it would be well to display the firm name at the bottom of the ad., in type about half the size of the headlines.

Mr. Randall is more successful in his display than in his composition. Many of his ads. are ambiguous, and sometimes positively obscure. Here is an extract from an ad. on breath perfume:

"If half the men would use these harmless things on occasion, life would be more tolerable to women; so would those men, many times the reverse, would make things a little better appreciated in the presence of others." Such a sentence as that is apt to make people tear their hair. Such things are usually a result of hurry or carelessness, but they hurt none the less for that.

The cut referred to in Mr. Randall's letter is that of a mortar bearing this query: "Who is F. O. R.?" This is run into the ads. frequently, and is a first-rate idea. It is a good eye catcher, and those who see it can hardly keep from thinking of the advertiser. I shall be pleased to receive more of Mr. Randall's ads. at any time.



## NEWS OF THE FORTNIGHT.

### Paskola and the Ohio Food Commission.

Some interesting testimony regarding the proceedings instituted by the Ohio Dairy and Food Commission to stop the sale of Paskola in that State has been brought out at the adjourned hearing before the Legislative Committee this week.

### Moving Against the State Board.

The Massachusetts State Board of Pharmacy has won for itself the praises of one who has ever been the bitterest opponent of the druggist, and who has heretofore sneered at the possibility of the existence in the drug trade of an element which did not sanction the illegitimate use of the druggist's liquor license; and this is Henry W. Faxon, who from being a maligner and opposer of any kind of freedom for the druggist has come actively to the support of the Board of Pharmacy, whose work he heartily commends. While there is much irritation at the existing liquor license limitations among those who are on principle opposed to restrictive legislation, we feel confident that in the end the retail drug trade will be vastly the gainer by the exertions of the board to purify the calling from persons whose presence in it tends to lower it in the eyes of the public. A *résumé* of the proceedings before the Legislature in the attempt to curtail the powers of the Board is given on page 255.

### Graduated Ph.G.

This is the graduating season for Colleges of Pharmacy. The Philadelphia College has graduated the largest class in its history, and a detailed report of the ceremonies incident to the event is given on page 260. The colleges of Brooklyn, Cincinnati, St. Louis, Kansas City and Pittsburgh have likewise graduated large classes during the past fortnight, all of which should go far to gladden the hearts of those interested in the cause of higher education for pharmacists. The standard keeps advancing year by year, and the number of graduates does not seem to diminish.

## The Food Commission Investigation in Ohio.

COLUMBUS, OHIO, April 20.—The investigation of the charges of bribery against the State Dairy and Food Department was resumed on Friday night, April 17, and the first witness called was J. B. Russell, a business partner of A. J. White of Paskola fame, who was in Germany when the investigation began and who returned in order to testify.

### J. B. RUSSELL ON THE WITNESS STAND.

Mr. Russell testified that he was in Cincinnati with Dr. White when the negotiations began to suppress the Paskola prosecutions. Before going to Cincinnati they had been called upon by a man named Guerrier, who told them that he could stop the prosecution for a money consideration. When they went to Cincinnati, Mr. Russell says, they again met Guerrier at the Grand Hotel, and he said the prosecution could be suppressed by

BUYING OFF THE CINCINNATI ATTACHES of the department. Dr. White asked Guerrier how much money it would require, who replied that he would go and ascertain. The next morning they found in Dr. White's mail box a card, supposed to have been left by Guerrier, on which was written, "\$10,000, the goods can be delivered."

Mr. Russell says they went to Columbus, and called at the State Food and Dairy Department. Dr. White showed the card to Dr. J. A. Sterritt, the Deputy Commissioner. Commissioner McNeal being absent, Dr. Sterritt treated them very pleasantly, and suggested that they leave a letter for Commissioner McNeal. They left a letter to Commissioner McNeal saying they were willing and anxious to comply with the law, and wanted to do anything to stop the prosecution.

After returning to New York they received a letter from Commissioner McNeal, saying that he didn't care what they did, he proposed to drive Paskola out of the State. The witness testified to Judge Dye's famous visit to New York as the guest of Dr. White. He testified that he assisted to entertain Judge Dye, and that he had personal knowledge of Dr. White giving Judge Dye a five-hundred-dollar bill, at Judge Dye's request. The money was to be

### GIVEN TO COMMISSIONER M'NEAL AS A PRESENT

to be used in raising a mortgage on the commissioner's farm. The witness said he saw the money, which was drawn from the bank for that especial purpose, and Judge Dye, while being shown about the city, told the witness that Dr. White had given it to him for Commissioner McNeal.

## TROUBLES IN MARIETTA.

Witnesses from Marietta were introduced whose testimony reflected upon Dr. W. Dye, a relative of Judge Dye, of Cincinnati, who was a deputy at Marietta. J. N. Hasty, a manufacturer of extracts, testified that he had been arrested for selling impure extracts and claimed that the sample examined was not the one obtained from him.

Prof. C. T. P. Fennel, the chemist, cross-examined the witness, and demonstrated pretty conclusively that the formula thoroughly corroborated the analysis.

## THREATS OF IMPEACHMENT PROCEEDINGS.

On Saturday afternoon there was some rumor of discontinuing the investigation, and the attorney for the prosecution threatened impeachment proceedings against Commissioner McNeal if the special legislative committee in charge of the inquiry failed to continue the investigation after the final adjournment of the General Assembly.

### MR. RUSSELL TESTIFIES AGAIN.

J. D. Russell, of the Paskola Company, on being again called to the stand, said the first proposition made to him was by Chemist Fennel, who told him that by giving Deputy Food Commissioner Luebbing \$100 the prosecution could be stopped.

The examination of Mr. Russell continued at length. The defense tried to show that there was a systematic attempt on the part of Russell and White to corrupt the Food Department. Russell related in detail the alleged proposition made to him by Fennel and others to settle the case.

### DR. STERRITT AND HIS PATENT MEDICINE COMPANY.

Dr. Sterritt denied the receipt of large quantities of wines, etc., but admitted having accepted a few bottles, possibly 18 all told. He denied that he had ever received \$5,000 or any part thereof from Dr. White, and rehearsed the history of the patent medicine company referred to in our last issue.

### PROF. C. T. P. FENNEL TAKES THE STAND.

At the Saturday night session, Chemist C. T. P. Fennel, of Cincinnati, said he analyzed Paskola and found that it was nothing else than glucose. He said that a hack driver came to his laboratory one day and told him that a gentleman around the corner desired to see him. He found

### MR. RUSSELL IN A HACK.

The witness alleged that Mr. Russell was intoxicated and said that while in that condition the night previous he sprained his foot. Russell wanted to talk to the witness about the Paskola case, but Fennel would not discuss the matter because of Russell's condition. He claimed that he had never had any conversation with Russell about a bribe or fee. He said he ascertained from Mr. McCarthy, city editor of *The Enquirer*, that Mr. Russell came to *The Enquirer* office in an intoxicated condition and made an affidavit to the effect that the witness had solicited a bribe from Russell in connection with the Paskola prosecution. Mr. McCarthy, the witness stated, told him that he had deemed it advisable not to use the matter under the existing circumstances and until after all possible investigation had been made. This, the witness said, was the

first he had heard of the alleged bribery. William Blohm, of Marietta, testified that he was a brother-in-law of V. L. Haas, who was prosecuted for selling adulterated mustard. He said that Chemist Fennel analyzed the mustard, and that Professor Fennel and a man named Hamilton made two demands of Haas through the witness to settle the case for \$25 instead of paying the fine, which was \$75. This testimony was given in an intermission in the examination of Chemist Fennel. The latter was recalled to the stand and denied that he had offered to settle the Haas case for \$25 or any other. At the close of Professor Fennel's testimony the committee adjourned to 7:30 Tuesday evening without announcing any decision in the matter of the demand of the prosecution for a continuation of the proceedings after the Legislature adjourns.

### Efforts To Cripple the Massachusetts Board.

BOSTON, April 20.—A spirited debate took place in the House of Representatives the other day, on the bill introduced by C. L. Young of Springfield, relating to the granting of liquor licenses to registered pharmacists. This bill takes from the Board of Registration in Pharmacy the power of determining what pharmacists should receive liquor licenses. Mr. Stevens of Dracut got the floor first at the hearing, and charged that the bill is introduced by one who has a personal spite against the Board of Pharmacy. He also asserted that if the Young bill is passed it sets up barrooms in every city and town in the State. Mr. Hayes of Lowell desired to go on record as being opposed to the bill, notwithstanding he had voted to substitute the bill as a substitute for an adverse report of the committee. He hoped the bill would be killed.

Colonel Young denied any personal motives in the matter. He had no spite against the board; he believed the board had acted unreasonably in many instances and had abused its powers. Representative Sheehan of Holyoke favored the bill. As regards the matter of spite, said Mr. Sheehan, the board could give the member from Springfield cards and spades and then beat him.

One member of the Liquor Committee said that never since he was on that committee had there been such an acrimonious hearing as that which had taken place on this bill. He said the committee was obliged to call the druggists' attorneys down and compel them to adhere to facts.

This bill has been ordered to a third reading by a vote of 90 to 75; but it is the general opinion that if the House does not reverse its action, the Senate will not pass it.

The question has stirred up considerable feeling in the State. Almost everybody must agree that it is proper that liquors should be sold by dealers in medicines, and there are plenty of druggists who sell liquor under conditions favorable and reputable. This bill gives to local authorities the power to grant or withhold licenses, instead of leaving it in the control of the Board of Pharmacy. The press of Boston generally is not favorable to the Young bill and the *Transcript* says editorially: "The administration of the State Board of Pharmacy may not be perfect, but in a matter of so

grave importance as the sale of liquor, it is better that an established commission, one that is known all over the Commonwealth, should have control, rather than it should be left to the uncertain management of Boards of Aldermen and Boards of Selectmen."

Some of the druggists who have been seen are in favor of the bill, and hope it will become a law.

### EVEN MR. FAXON SUPPORTS THE BOARD.

Every member of the Massachusetts Legislature has received from Henry H. Faxon of Quincy, one of the foremost men in the temperance work in this State, a letter in which he says:

No agency in this Commonwealth has done more toward the extermination of the drug store saloon nuisance, and thus raised the standard of the profession, than the Massachusetts Board of Pharmacy. This statement has been endorsed by all friends of law and order who are cognizant of the situation, and by all reputable druggists in the State. I sincerely hope you will pass all bills which come before you in the interest of the Board of Pharmacy, and reject every measure which tends to interfere with the good work which it is doing to elevate the drug business in Massachusetts.

This is the highest tribute yet paid to the Pharmacy Board.

### SONS OF TEMPERANCE UPHOLD THE BOARD.

Charles E. Dennett, the grand scribe of the Sons of Temperance of Massachusetts, considers one of the vital matters concerning the temperance cause in this State is the proposition to curtail the powers of the Massachusetts Board of Registration in Pharmacy, so that the board shall be obliged to grant certificates which will make all druggists, who are registered pharmacists, eligible to receive a sixth class liquor license, without regard to their fitness, or how they may have conducted their business in the matter of liquor selling in the past. Mr. Dennett is of the opinion that an extension rather than an abridgement of the power would be desirable. No reputable druggist, he contends, can have objection to the law, as it is now, and many are in favor of all existing restrictions, as a protection to themselves from disreputable and liquor selling druggists; and he expresses a hope that no backward step will be taken as is proposed in the Young bill. He asks every person of good order and temperance to set his face against the movement and uphold the work accomplished by the Board of Pharmacy in this State.

### A New Law for Texas.

At the next session of the Legislature an effort will again be made to amend the law regulating the practice of pharmacy. The object sought in the proposed amendments is to enlarge the scope and increase the usefulness of the present law. It is proposed to abolish the present system of district boards and have all examinations conducted by a State board to be appointed by the Governor. It is also proposed to make the law operative throughout the State, instead of restricting it to towns of 1,000 or more inhabitants, as at present.

Heretofore members of the Legislature who were individually in favor of the proposed changes in the law would not interest themselves because their local druggist had not conferred with them on the subject.

The legislative committee of the State Association now ask that all druggists help in this matter, in which they are directly interested, by personally requesting their Representatives and Senators to give this bill, when introduced, their hearty and unqualified support. "Explain to them," asks the committee, "the great value such a law would be to the people of the State in placing the dispensing of medicines in the hands of properly qualified persons and that our State will cease to be the dumping ground of incompetency, as it is at present. Incidentally, also mention the benefit it will be to you individually, by shutting out from competition with you in your business the army of quacks and charlatans that always flock to fields where there are lax laws regulating the practice of pharmacy. The proposed bill will be presented to the State Pharmaceutical Association for approval at the meeting to be held in Dallas on May 19, and we would be pleased to have you present and aid with your counsel in perfecting it. Of course it is understood that the proposed law, if passed, cannot interfere with any one at present engaged in the drug business."

The bill is being pushed by J. S. Wilson, Jno. A. Campbell and H. C. Whitney, as the Committee on Legislation of the Texas Pharmaceutical Association.

### SPECIAL RAILROAD RATES TO THE MEETING.

The railroads offer the following rates to persons attending the meeting of the association at Dallas on May 19: From stations within 75 miles of Dallas, one and one-third fare; from stations from 76 to 100 miles of Dallas, a rate of \$8; from stations 100 miles or more a rate of one fare for the round trip.

### Charles A. Santos Dead.

NORFOLK, VA., April 17.—Charles A. Santos, one of the best known druggists in Virginia, died at his residence, 181 Freemason street, Norfolk, April 16, after an illness of a week. The deceased leaves three children, all residents of Norfolk—Mrs. James E. Etheridge, C. O. Santos and Walter T. Santos. Two brothers and two sisters are also left—R. W. and A. P. Santos and Misses Annie and Mary Santos.

Mr. Santos was one of the oldest druggists in the city in point of business. Though only 68 years of age, he has been in the drug business here for at least 50 years, succeeding his father, M. A. Santos, who was a prominent druggist before him.

In the terrible yellow fever scourge of 1855, he nobly remained in the city, dispensing the medicines so badly needed from the house in which he died. He was at one time president of the Virginia Pharmaceutical Association and has always been a prominent member of that organization.

The American Medical Association will hold their annual meeting this year in Atlanta. The meeting will last one week from May 2. Headquarters for the association have been secured at the Kimble House. The local Committee of Arrangements consists of the following well-known Atlanta physicians: Dr. W. F. Westmoreland, chairman; Dr. J. McFadden Gaston, Jr., secretary; Dr. Lewis Jones, treasurer; Dr. W. S. Elkin, vice chairman.

## IN GREATER NEW YORK.

New York, Brooklyn, Jersey City and Vicinity.

J. H. O'Halloran has succeeded H. M. Boardman, at 1588 Fulton street, Brooklyn.

The pharmacy formerly owned by L. A. Spaeth, at 1487 Broadway, Brooklyn, has been purchased by A. A. Mitchell, formerly of Perry's Pharmacy.

J. C. Knieger has bought out the pharmacy of Hamilton & Knieger at Salamanca, N. Y. Mr. Hamilton is now with the Glycerin Whiskey Company.

S. V. Hude of Fourth avenue and Forty-sixth street, Brooklyn, has opened a branch pharmacy a few blocks away from the premises presently occupied by him.

Julius Jungman is selling out at auction his stock of drugs at 1828 Third avenue, this city, preparatory to moving into a new store which he has recently acquired.

C. C. Wells, the proprietor of an old established and paying drug store in Saratoga Springs, N. Y., died on April 10. The business will be continued by his son, C. F. Wells.

J. A. Sangston was missed from the New York office of the Low Art Tile Company last week. He paid a visit to his old home, Greensboro, Md., to attend the marriage of a niece.

Recent visitors to the New York drug market included W. R. Martin of Norfolk, Va., and Mr. Whitcomb, of the Davis Drug Company of Warren, Pa. Mr. Davis is on his vacation, and has been stopping at Atlantic City and Philadelphia.

F. W. Kidder, so long identified with proprietary medicine interests in this city, and formerly of the firm of F. W. Kidder & Co., has returned to New York after a protracted absence in Japan. His stay abroad lasted over three years.

W. P. Ungerer, the well-known dealer in perfumes and perfumery products of this city, sails for Europe May 1, on "La Bretagne." He will visit London, Paris, Grasse and other large cities in Continental Europe, with a view to establishing new connections for the firm.

The Olympia Pharmacy, on Long Acre square, opposite the theater after which it is named, is about to undergo extensive alterations at the hands of Seeger & Gross, the drug store architects. A massive and artistic soda fountain of the Low Art Tile pattern will be one of the features of the remodeled store.

A special meeting of the College of Pharmacy of the City of New York was held April 6, for the election of officers to fill vacancies on the New York City Board of Pharmacy, when the old board was re-elected. The officers of the board consist of Dr. Cyrus Edson, Dr. William Balser and Professors Oehler, Jelliffe and Diekman.

John McKesson, Jr., sailed for Europe last week on the "Werra." He was accompanied by all the members of his family except his son W. Irving, who was unable on account of business reasons to accompany the party. It is Mr. McKesson's intention to make a tour of

Spain, Italy and France, if the diplomatic relations between the United States and those countries will permit.

The many friends of Professor Chandler of Columbia College and the New York College of Pharmacy will be glad to learn of his happy recovery from an operation for appendicitis. He was taken ill April 11, and the operation, which was performed by Dr. Bull two days afterward, proved a complete success.

A ripple of interest was started in New York drug circles this week by the announcement that the Brandreth Company had decided to make a reduction in the wholesale price of Alcock's plasters. The reduction is from \$18 to \$12.50, and it is understood that the retail price is to be lowered to 15 cents. The plasters formerly sold at 25 cents, except in the larger cities, where a cut to 10 and 15 cents was not uncommon.

Measles has been quite prevalent in New York City during the past month or two, and a number of well-known drug men have caught the infection. Among others of the staff of W. H. Schieffelin & Co. who were afflicted was A. T. Sneden, who is happily back at his desk again looking fully recovered. Mr. Sneden has had other causes for congratulation lately, an addition to his family having arrived safely a few weeks ago in the person of a baby daughter.

An interesting exhibit of microscopical preparations of crude drugs by the members of the classes of '96 and '97 of the New York College of Pharmacy was one of the features of the seventeenth annual exhibition of the New York Microscopical Society, held at the American Museum of Natural History, April 14. The exhibit included specimens of sarsaparilla, ipecac, nux vomica, galangal, adulterated spice, theobroma, calisaya bark, morphine and quinine.

William J. Quencer, who owns the pharmacy at Fifty-seventh street and Columbus avenue, is making a number of improvements both in the exterior and interior appearance of the premises. This is the second time that Mr. Quencer has made alterations in the appearance of his pharmacy, but the improvements now being made are on a much more extensive scale than any previous ones, and include the building of new windows and doors on the Ninth avenue side of the store.

President Clark of the Brooklyn Board of Aldermen has appealed to Governor Morton for a pardon for John Crozier of Brooklyn, who is serving a sentence of 18 months on Blackwell's Island for embezzlement. Crozier was convicted in New York about a year ago of embezzling from McKesson & Robbins, wholesale druggists. The principal reason for asking that he be pardoned is the destitute condition of his family. Gov. Morton promised to take the application under advisement.

McKesson & Robbins of this city have been subjected to some annoyance of late by the operations of a clever swindler, who represents himself as a traveler for the firm and solicits small loans from druggists in the territory

through which he may be traveling. He introduces himself under the name of George Bronson, and the excuse given in each case is that he is awaiting a remittance from the firm in New York, and is in present need of railroad fare to some nearby point. The amounts collected have seldom exceeded \$2.50, and have been as low as \$1. When last heard from he was operating in Atchison, Kan. There is no telling how many firms he may claim to represent.

The first of a number of suits by the New Jersey State Board of Pharmacy against unregistered pharmacists came up for trial before Judge Henry in the Second District Court March 28. The defendant was Otto Eichopfel, a Springfield avenue druggist, charged with the sale of drugs without having complied with the requirements of the law. Mr. Knight, counsel for the defendant, made the objection that the Governor of the State had failed to appoint the five members of the board, and in consequence of this failure the board was acting under a law passed in 1886, of which last year's act was an amendment, and that under the law such action could not be brought. Mr. Knight moved the dismissal of the case on the ground that, as the provisions of the amendment of 1895 had not been fulfilled, there is really no State Board of Pharmacy. Judge Henry said he would decide that point later. He reserved decision in the case.

### Society of Chemical Industry.

The usual monthly meeting of the New York Section of the Society of Chemical Industry was held in the College of Pharmacy, 115 West Sixty-eighth street, on Monday evening, April 20, Alfred H. Mason in the chair. An interesting paper on "The Chlorination of Gold Ores" was read by J. Dawson Hawkins of Cripple Creek, Col. The paper was one of technical value to the metallurgist and elicited some discussion. An important feature of the evening's meeting was the announcement by Secretary Schweitzer of the officers elected for the ensuing year. Considerable interest was taken in the probable choice of the section for chairman, and the announcement of the election of Prof. Chas. F. Chandler of Columbia College to fill this office seemed to give great satisfaction. Following is the complete list of officers elected: Chairman, Prof. Chas. F. Chandler; Hon. Secretary, H. Schweitzer; Hon. Treasurer, R. C. Woodcock. The following were elected to fill vacancies on the committee: M. Alsberg, color merchant; Dr. Wm. Jay Schieffelin, manufacturing chemist; Wm. J. Fuerst, chemical merchant; Dr. R. Schipphaus, consulting chemist; Alfred H. Mason, manufacturing chemist.

### Alfred B. Scott.

AN AMERICAN DRUGGIST man who chanced in at Crittenton's the other day found Mr. Wells of the firm entertaining Alfred B. Scott of Scott & Bowne, now of London, but formerly of New York. Mr. Scott will be remembered by a host of friends as the former president of the Association of Manufacturers and Dealers in Proprietary Medicines. He has returned to United States soil after about a year's absence among the fogs of London. When asked for a statement of his impressions of English men of business and their methods, he said:



"There is really no difference between the methods pursued here and on the other side. The English business man is, perhaps, a trifle more conservative and difficult to approach than his prototype here, but when you come close to him and establish business relations, you find him very much the same."

In reply to a question as to the extent of the advertising done by Scott & Bowne, Mr. Scott said he favored posters and circulars above newspaper advertising.

"There is one line of business in which the Englishman differs from the American," he continued; "the English newspaper is a much more conservative institution than the American. To illustrate, a friend of mine, the manager of the *Q—O—Co.*, had succeeded in gaining the ear of the business manager of *Lloyd's Weekly Newspaper*, a newspaper which, you know, circulates over 1,000,000 copies weekly. 'What are your rates for advertising?' he queried. Being told the cost, which was low compared with the rates charged here, my friend said, 'I will take 8 pages at that rate.' The manager expressed surprise and asked to see the copy for the advertisement. On being shown it, he said, 'I cannot accept this at all,' and absolutely refused to entertain the order. His objection was directed against the number of cuts and display matter which figured in the advertisement submitted. You can imagine the business manager of an American newspaper turning down an advertisement of this or any other size," concluded Mr. Scott.

Mr. Scott expects to remain about a month in the United States, which is the full limit of time he has allowed himself to transact the business which brought him over. When the AMERICAN DRUGGIST man left him he was bemoaning to Mr. Wells his inability to pay a personal visit to all of his many friends in the two wholesale druggists' associations. He expects to make a trip to Philadelphia and Boston, and this will probably be the extent of his visiting here before he takes his departure for London again.

### Libel Suit Against Fritzsche Bros. Dismissed.

A case of considerable interest to pharmacists was argued last week before Judge Lacombe and a jury in the United States Circuit Court. The action was brought by the Joseph C. Butler Company of this city to recover damages for an alleged libel contained in a recent circular of Fritzsche Bros. The Jos. C. Butler Company are the agents for a preparation sold by them under the name of "Vanilla Crystals," an article much used by confectioners and bakers for imparting a vanilla flavor to their products. Vanillin is a synthetic product manufactured under French and German patents respectively by the firms of Delaire & Co., France, and Haarman & Reimer, Germany, the manufacture of which in this country is protected by patent rights. It is an exact reproduction of the Vanilla Crystals found on the Vanilla Bean. The process of manufacture is a very expensive one, and the product cannot be sold to the consumer at less than \$5 per ounce. The plaintiff's article is sold at a considerable reduction from the price charged by the agents of the French and German houses which manufacture synthetic Vanilla.

The firm of Fritzsche Brothers, which

is the American branch of the house of Schimmel & Co., Leipzig, Germany, issue from time to time circulars of information concerning staple essential oils and perfumery products, and in some of these periodical publications the results of an analysis of the product marketed as "Vanilla Crystals" were set forth with statements that these "Vanilla Crystals" were an adulterated article. This, in substance, constituted the libel complained of by the Jos. C. Butler Company, who entered suit for \$50,000 damages. The plaintiffs were represented before Judge Lacombe by C. J. Shearn and Benjamin F. Einstein, while Fritzsche Brothers had for counsel Joseph H. Choate and Antonio Knauth.

Mr. Butler, the president and treasurer of the Jos. C. Butler Company, who was the principal witness for the plaintiff, did not pretend that the "Vanilla Crystals" sold by his company were such Vanilla Crystals as are found on the bean and to which the taste and odor of the beans are due, or that they were true chemical reproductions of those Vanilla Crystals, but maintained that they were



THE LATE FERDINAND LASCAR, PH. GR.  
(See page 229, issue of April 10.)

an original production, which had the effect of vanilla deprived of what he called its "fibrous taste." While in the complaint he had sworn positively that the analysis made by Fritzsche Brothers was false, he had to admit when on the witness stand that he had only been informed by the manufacturers, Stearns & Gordon of Jersey City, that this was so. The plaintiff declined to produce either Mr. Stearns or Mr. Gordon as witnesses, and confined himself to attempts to show by microscopical comparisons that the statements of Fritzsche Brothers were not true. In this the plaintiff utterly failed, and gave up the case before the defendants had an opportunity of showing the correctness of their analysis by their witnesses. The defendants had a number of well-known chemists present to testify in their behalf, among others, Mr. McElroy of the United States Department of Agriculture, the author of some well-known publications treating of adulterated articles investigated by the Government.

Some surprise was created in the court room by the admission of Mr. Butler, when cross examined by Mr. Choate, that the Vanilla Crystals sold by the Jos. C. Butler Company at some time contained acetanilid, the chemical name for antifebrin.

The defendants will recover the costs

of the suit upon this dismissal of the complaint.

### Commencement Exercises at the Brooklyn College.

The fifth annual commencement at the Brooklyn College of Pharmacy, class of '96, was held in Association Hall, Brooklyn, on the evening of April 6. The hall was filled with friends of the graduates. Frederick H. Pamphilon, president of the college, presided, and grouped around him on the platform were the following members of the faculty: Elias H. Bartley, Henry W. Schimpf, A. Percival Lohness, William Anderson, D. C. Mangin, J. F. Golding, Walter O'Brien and Joseph L. Mayer. A string orchestra played popular airs during the exercises, which were further enlivened by several selections presented by the Metropolitan Quartet and Miss Kathryn Krymer.

After several numbers from the orchestra the invocation was pronounced by the Rev. Charles Edwards, D.D., and Prof. Elias H. Bartley, dean of the college, presented to the graduates their diplomas and certificates and conferred upon them the degree of graduate in pharmacy.

He was followed by President Pamphilon, who made a few complimentary remarks and awarded the following prizes: To Harry B. Palmer, a gold medal for general proficiency; to E. C. Woodcock, a silver medal for passing the best examination in pharmacy. Charles S. Rowlenon was presented a handsome microscope, the alumni prize, by William A. McIntyre, president of the alumni association.

The honor rolls, which were read by Dean Bartley, were as follows: Senior honor roll—Harry B. Palmer, E. C. Woodcock, Charles G. Rowlenon, Evan M. Johnston, Lindsay C. Gardner, N. H. Rejebian, Frank L. Downs, Percy Pamphilon, J. G. Stiefel and Harry R. Lawrence. Junior honor roll—John A. Scheltings, David Rousheim, Max Schwarz, J. H. Jacobson, Max Gluckman, F. Schroeder, Jr., Emil Bennor, Alexander Braunstein and Clinton S. Ramee.

The graduating class is composed of the following:

Charles A. Cannon, Frederick D. Crawford, Henry R. Loehr, William F. Morgan, Frank J. Morrisay, George A. Mulvaney, Frederick Swift, John Uhlman, Aaron Becker, Frank L. Downs, Richard Gaupp, Evan M. Johnston, Harry R. Lawrence, Herbert F. Loney, Isaac Miken, Harry B. Palmer, Percy Pamphilon, Nazeret H. Rejebian, Charles S. Rowlenon, George W. Schmidt, George J. Stiefel, John E. Thomas, William H. Uhler, Frederick H. Weyer, E. Clayton Woodcock, Henry M. Borchers, Louis B. Campbell, Lindsay C. Gardner, Frank G. Goeltz, Joseph P. Gmelch, Israel Herman, Frank L. Kirchhoff, Alfred Schletter. Executive Committee—Class officers: Lindsay C. Gardner, president; Harry B. Palmer, vice-president; Louis B. Campbell, secretary; E. Clayton Woodcock, treasurer. Class representatives: Evan M. Johnston, Frank L. Downs, Percy Pamphilon, Harry R. Lawrence.

### Prefers Our Prices Current.

THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD is one of the best. I always go to it for prices in preference to any other.

W. B. HUNTER.  
RALEIGH, N. C., April 6, 1896.



## NEW YORK STATE.

## Dr. Benedict is Dismissed.

BUFFALO, April 18.—Dr. A. L. Benedict, an instructor at the Buffalo College of Pharmacy, has been dismissed by the faculty, on account of trouble arising from an article written by Dr. Benedict and published in Merck's *Medico-Surgical Bulletin* last February. Mention was made of this affair in the last number of this journal. The indignation of the students was so deep that the faculty, at their request, removed the offending instructor, who insists he did not aim at the regular pharmacists who do a legitimate business, but that class who overcharge; and he asserts that since the controversy became known he has been in receipt of many letters supporting him. The students, however, state that in their interview with him relative to the trouble he used more emphatic terms of disapproval in reference to pharmacists in general than he did in his published article.

Eugene Irr will open a new drug store in Buffalo, May 1, at the corner of Genesee and Kehn streets.

P. M. Lockie has sold his present drug stand in Buffalo to C. W. Tuerke, and will take possession of his fine new store on Main street, the Central Park locality.

W. E. Wolfe, pharmacist at the corner of Vermont street and West avenue, Buffalo, has sold his stock and fixtures to Walker & Lathbury, who will take possession May 1. Mr. Wolfe will take a trip for the betterment of his health to the far West, making either Colorado or California his objective point.

H. G. Pierson, the well known Hornellville pharmacist, has entered a window in competition for a prize offered by Hance Bros. & White of Philadelphia, proprietors of "Frog in Your Throat." The dress of the window is referred to as at once unique and attractive and worthy of more than passing notice. The whole scheme of decoration is a deep green, the base being a mossy substance of deep green, which is banked up to a minor framed in the same color and relieved on each side by tropical palms. In the foreground, on one side is a pool containing live frogs and on the other the frogs are enjoying a game of craps on the sand. Frogs in every conceivable attitude occupy other portions of the window.

## MASSACHUSETTS.

## WOMEN DRUGGISTS IN MASSACHUSETTS.

In the Boston directory of 1800 the name of Jane Loring, apothecary, 41 Cornhill street, appears. This was probably the first woman druggist in the city. The Massachusetts College of Pharmacy was instituted in 1923 and incorporated in 1852. That year the American Pharmaceutical Society was organized. About three years ago F. H. Butler, the secretary of the Massachusetts Board of Registration in Pharmacy, made an investigation and found that from 1885, when the law of registration went into effect, 40 women had been registered. Many had certificates and were in business. Since 1892 eight more have been registered by the board. They are reported as being enthusiastic workers in the profession and occupy responsible positions when not in business for themselves.

## POLICE RAIDERS GET A DOSE.

An uptown druggist who keeps the store at 996 Washington street had a little experience with a company of police raiders recently that they will not soon forget. Dr. Kronberger was waited upon by four officers, who came to seize the "large quantities of liquor" the enemies of the druggist had told were there. The four men in nosing around knocked over a table containing about one hundred bottles of medicine, breaking many of them and giving the doctor a claim against the city. Then they went into the cellar, or rather three of them did, leaving the fourth to frisk around up stairs. The amiable doctor had been annoyed so many times he resolved to have some fun. So he had filled four large gallon bottles, labeled whisky, holland gin, sherry and brandy, with a 28 per cent. solution of ammonia. On the back of the bottle he had the correct label marked with the true chemical formula. Finally the lonely officer came across the four. He was actually beside himself with delight, until he pulled out the cork, took a whiff, and was knocked to the floor quicker than if he had been hit by a freight train. When he recovered his breath he was so mad he wanted to tear the doctor's heart out and do other gory things, but he made up his mind the other three officers should have a little experience, too. When they came up stairs he pointed to his find. Each one grabbed a bottle, and took a large and enthusiastic smell, and then executed a Hottentot dance that nearly shook all the bottles from the shelves. Then they concluded they had been made fun of, and resolved to have their revenge. A few evenings ago an officer went into the store and told the clerk that the doctor had been taken suddenly ill, and wanted some whisky. He got it, and then presently another officer came to get a \$2 bill changed and went out, leaving 75 cents on the counter. The clerk was arrested, and it cost him \$100 to settle, because he disliked the publicity of a public trial, and would not fight the case. The next time the official raiders come, the doctor says, he will give them essential oil of mustard.

## DOING A GRAND WORK.

The Florence Crittenton Home, established in this city by a benevolent druggist of New York, in the wholesale line, is fulfilling the objects and wishes of its founders. In the first month 24 young women were given instruction in the practical duties of housework, dressmaking, millinery, etc. Besides, many dinners and suppers were provided the poor.

## ANNUAL CUSTOM OF THE BROWNS.

The annual distribution of Brown's Bronchial Troches to Governor Greenhalge and the members of the Legislature was made recently by the house of John I. Brown & Sons. It is an annual custom of the Browns long continued.

## Among the Trade.

It has been decided in Weymouth that no liquor licenses shall be granted this year.

The drug store in Southbridge, formerly conducted by Jesse Robinson, will be occupied by Alexander W. Paton.

George Waters, a clerk in Marshall's drug store at Beverly Farms, sustained a painful injury to one of his hands by cutting one of the fingers with glass.

A. B. Morse of Milford, the Main street druggist, has bought a fine lot of vacant land on Strawberry Hill, Hull, and will erect thereon a handsome summer cottage.

A Plymouth druggist has put an electric tapper in his window, and its incessant rattle is sufficient to draw attention to some of the articles in the show window.

E. P. Duval has been in charge of the Dr. P. Duquet drug store, in Fitchburg, since last November. He is making a success of it and has a first-class establishment.

One of the oldest druggists in the city, Francis T. Church, who was for more than forty years in business at the corner of Howard and Court streets, is dead. He leaves a widow and a daughter.

John D. Bonner of Bonner & Preston has been elected a member of the Paint and Oil Club of Boston, and A. E. Carr has been added to the Pricing Committee of the club.

Dr. L. D. Drury of 148 Dudley street, Roxbury, is first vice president of the Massachusetts College of Pharmacy. He has been in his present location 25 years, and the store is one of the best.

The new and elegant drug store of G. Edwin Batchelor, at the corner of Washington street and the Square, in Haverhill, was opened last week. The stock is new, and the interior of the store is very handsome.

J. P. T. Percival, who was a druggist on School street many years, left a fortune of \$32,165, all personal, with the exception of a very small amount. An inventory has been filed in the probate court.

There was a larger gathering than usual at the last regular meeting of the New England Drug Exchange, held at Young's. After dinner, remarks on the state of trade and the prospects for the future were made.

Between the hours of 2 o'clock and 4, on Monday, March 9, while the funeral services of Governor Greenhalge were taking place, the druggists of Boston and vicinity drew the curtains of their stores. It was a mark of respect most favorably commented upon.

E. C. Jernegan of the Dudley street pharmacy, 258 Dudley street, has had a year's experience in his establishment, having come from Springfield to engage in business there. The store has grown under his administration, and is on the high road to prosperity.

A new corporation has been formed in this State, called the American Fertilizer Company. The capital stock is \$15,000; shares \$100 each. The directors are: L. Vernon Briggs, president; H. D. Tudor, treasurer, and A. H. Ward. The purpose of the company is to manufacture fertilizers, and to deal in chemicals.

"Pharmacy Laws" was the subject of discussion at a recent meeting and dinner of the Massachusetts M. C. P. Club, a secret organization connected with the Massachusetts College of Pharmacy. The debate was taken part in by the members generally.

C. R. Jones of Portsmouth, N. H., is the manager of Chester H. Beane's new drug store in South Gardiner, Me. He is an experienced pharmacist, and a first class man, and has already been taken

right into the midst of South Gardiner society.

A party of friends called upon Joseph Precourt of the Lincoln street pharmacy, in Marlboro, the other evening, and presented that gentleman a handsome easy chair, as a reminder that his friends are numerous in Marlboro, and that they wish him and his bride happiness and prosperity.

Henry K. Mansfield, a Salem druggist, suffered the loss of his elegant mansion last Tuesday. The house, which contained works of art and a great deal of costly furniture, was totally ruined. Loss will be about \$10,000, covered by insurance. Mr. Mansfield will rebuild on the same lines at once.

Alderman George A. D. Stickney has completed nearly a quarter of a century in the drug business at the store, situated on the corner of Essex and Elm streets, Salem. The exact date is March 80. Although but 47 years old, Mr. Stickney and his charming wife will celebrate their silver wedding in April. The alderman is one of the solid men of the Witch City.

Dr. Henry P. Walcott, chairman of the State Board of Health, has begun a series of lectures, eight in number, on "State Medicine." At the first lecture he referred especially to "preventive medicine," and followed the subject down to the discovery of vaccination. The lectures are given in Huntington Hall and are largely attended.

## PENNSYLVANIA.

### Seventy-fifth Anniversary of the Philadelphia College of Pharmacy.

PHILADELPHIA, April 28.—The seventy-fifth anniversary of the founding of the Philadelphia College of Pharmacy was celebrated by a banquet served at the College Hall on North Tenth street, last night, a brilliant company having been assembled to do honor to the occasion.

After an elaborate and well served dinner was disposed of, Prof. Jos. P. Remington, who acted as toastmaster, in a well turned address introduced the first of the speakers, the Hon. Charles Warwick, Mayor of Philadelphia, who responded to the toast, "Our City."

The following toasts were then given: "Philadelphia College of Pharmacy," by President Charles Bullock, Ph.M.; "University of Pennsylvania," by Provost William Pepper, M.D.; "Technical Education," by Dr. Edward Brooks, Superintendent of Public Education of Philadelphia; "Medical Profession," by Horatio C. Wood, M.D.; "The Press," by Hon. A. K. McClure; "Jefferson Medical College," by Prof. Jas. Holland; "Pharmaceutical Legislation," by Hon. George S. Graham, District Attorney; "The Alumni," by Adolph W. Miller, M.D.

The speeches made throughout were excellent, and the attention of the large audience present was held to the last, although it was near two o'clock when the speaking concluded.

#### THE SOUVENIR.

The souvenir of the dinner was an elaborate affair gotten up in a most artistic manner, the sheets being bound together with the college colors, blue and

white, and bearing on the exterior the blue wax seal of the corporation.

The first page of the interior showed an illustration of Carpenter's Hall, where the college was founded in 1821; the second page showed the different buildings which have been successively occupied by the college, and the names of its presidents, as follows:

#### PRESIDENTS OF THE COLLEGE.

1821-1825, Charles Marshall; 1825-1829, William Lehman; 1829-1854, Daniel B. Smith; 1854-1869, Charles Ellis; 1869-1885, Dillwyn Parrish; 1885-1896, Charles Bullock.

Then followed a record of the progress of the college and of its buildings and equipment, its educational progress and literary progress, this last consisting of the titles of works issued by the faculty of the college, as follows:

#### LITERARY PROGRESS.

1825, First issue of *American Journal of Pharmacy*; 1826, the "Druggist's Manual," issued by authority of the trustees; 1838 first edition of U. S. Dispensatory by the faculty of the college; 1840, Manuscript for U. S. Pharmacopoeia presented to Committee of Revision; 1845, Bridge's edition of "Fowne's Chemistry"; 1849, Procter's edition of "Mohr & Redwood's Pharmacy"; 1856, first edition of "Parrish's Pharmacy"; 1865, First Annual Report of Alumni Association; 1879, first edition of the "National Dispensatory"; 1881, first edition of "Maisch's Materia Medica"; 1885, first edition of "Remington's Pharmacy," and the first edition of "Trimble's Practical and Analytical Chemistry"; 1891, first edition of "Sadtler's Handbook of Industrial Organic Chemistry"; Trimble's "The Tannins," Volume I; Alumni Report, issued monthly; 1894, Trimble's "The Tannins," Volume II; 1895, "Bastin's Laboratory Exercises in Botany," and Sadtler Trimble's "A Textbook of Chemistry."

In the library of the museum of the college, where the guests were received, all the above works and a complete file of the *American Journal of Pharmacy* were on exhibition during the evening.

This was followed by the menu card proper, by a list of the officers, trustees and faculty of the college and the officers of the Alumni Association and the members of the Committee on Seventy-fifth Anniversary, as follows:

#### COMMITTEE ON SEVENTY-FIFTH ANNIVERSARY.

Howard B. French, chairman; George M. Beringer, Joseph W. England, Adolph W. Miller, M.D., Mahlon N. Kline, W. Nelson Stem, Joseph P. Remington, Henry Trimble, C. Carroll Meyer, J. L. D. Morison, M.D., W. L. Cliffe, Wallace Procter.

The college and the members of the committee, and more particularly the efficient chairman, Howard B. French, are to be most warmly congratulated upon the success of the affair.

#### Philadelphia Happenings.

Edson S. Bastin, Professor of Materia Medica and Botany of the College of Pharmacy, has announced that the spring course in botany and microscopy will begin April 23 and end July 2. This includes a course in practical botany for beginners and a course in vegetable histology. During the course there will

be botanical excursions under the direction of the professor of botany or one of his assistants. They will occur on Wednesday of each week, beginning April 22 and ending July 1.

William Getty, who was arrested some time ago at the instance of Professor Trimble and committed to prison by the magistrate for robbing the chemical laboratory of the Philadelphia College of Pharmacy, has been released by Judge Beidler. Young Getty pleaded guilty, but strong pressure was brought to bear upon the judge to make his sentence as light as possible, and as this was the first time he had ever been arrested, and on the promises of his parents to send the boy abroad and keep him out of this country, he was discharged. It is understood that the boy is going to Germany. The professors of the college are not in any way pleased with the turn the case has taken, as it was thought that it would have been the best thing to have had the boy sentenced, as it would have been an example for the rest.

Dr. William Savery, who was at one time a well-known druggist of this city, but of late years has devoted his time to the practice of medicine, died at his residence on Morris street, Germantown, on March 13. Dr. Savery was born in this city October 20, 1832. He was graduated from the Philadelphia College of Pharmacy in 1854, and was appointed resident apothecary and medical registrar at the Friends' Asylum for the Insane, and served in that capacity till 1860. He graduated at the University of Pennsylvania in the medical class of 1861, and was resident physician in the Wills Eye Hospital from 1861 to 1862. From April, 1862, to October, 1863, Dr. Savery was resident physician and surgeon in the Pennsylvania Hospital. He was also volunteer surgeon in the United States Hospital at Fredericksburg, Va. From 1870 to 1871 Dr. Savery was physician to the Winnebago tribe of Indians in Nebraska under appointment of General Grant. From 1872 to 1888 he was attending physician to the Hospital of the Good Shepherd, near Bryn Mawr, where he engaged in private practice. Since that time he led a retired life. The funeral will take place on Monday at the Friends' Meeting House, Twelfth street, above Chestnut, at 2 p.m.

Charles E. Keller, a member of the class of '88, who has one of the handsomest drug stores in West Philadelphia, at Fortieth and Locust streets, will, at the end of the month, open a new one at the corner of Eleventh and Pine streets, in the Gladstone apartment house. Mr. Keller is fitting this store up in a lavish manner, and he intends to make it one of the features of that section of the city.

Considerable surprise was created in drug circles on April 17 over the assignment made by George B. Weatherill & Co., 56 North Front street. This is one of the oldest established paint manufacturing houses in the country, and until the beginning of this year they did a large drug business, but since January 1 the firm have confined their work to paints alone. The assignment was made for the benefit of creditors to Ernest W. Holdt, their chief bookkeeper; the deed conveys real estate in this city and Camden, a detailed description of which is yet to be furnished. Liabilities of the firm are estimated at between \$150,000 and \$175,000, and it is believed that the

assets will exceed the liabilities, though no schedule has been prepared. This firm have always enjoyed excellent credit and the failure is because of inability to make collections, and recent heavy losses sustained through failure of customers, it is thought that the firm will soon be able to resume business.

On April 15, A. S. Seebold, Deputy Food Inspector, began proceedings before Magistrate Harrison against a number of grocers and other dealers charged with a violation of the pure food law, passed by the last Legislature. Most of the hearings of this day were confined to grocers, all of which were held in \$500 bail for appearance in court. The cases against the manufacturing druggists were postponed until Monday.

The suit brought by the Pure Food Commissioner of Pennsylvania against a number of druggists in this city for selling certain cod liver oil and malt preparation has again been postponed, this time the case going over until April 28. The manufacturers interested are not alarmed, and they propose to make it hot for their accusers.

Chancellor McGill of New Jersey has

allowed an order restraining Sheriff Barrett of Camden from selling the Keystone Chemical Works on a judgment of \$7,500, and allowed the appointment of a receiver to settle up the affairs of the company.

The Germania Wine Company of Hammondsport, N. Y., have issued a circular notifying the trade in Philadelphia that they have placed the agency for all goods to be sold here in the hands of Bernard Fischer, 508 and 510 Callowhill street. The Germania Wine Company refer to this arrangement as a great benefit to the trade, since it enables them to lay down goods in carload lots in Philadelphia and vicinity in proper season, and save to customers the difference in exorbitant broken freight lists. The products of the Germania wine cellars are well known, and compare favorably with the best imported.

Dr. George B. Armstrong of Troy, Pa., was in this city recently, and laid in a large supply of necessary articles for his store.

William W Maddock has moved his store from Eleventh and Somerset streets to Germantown avenue and Somerset street.

toasts to "Our Alma Mater" were responded to by Prof. Remington, Prof. Samuel P. Sadler, Prof. Henry Trimble and Prof. Edison S. Bastin. As the students of this year's graduating class represent almost every State in the Union, and Germany and South America, each one was called upon to speak of his State or country. The young ladies also were requested to make speeches, this being one of the things in which they were expected to equal their fellow-students as well as in the college work.

On Wednesday evening the seventy-fifth

#### COMMENCEMENT EXERCISES OF THE COLLEGE

were held in the Academy of Music, the exercises being conducted by Prof. Joseph P. Remington, dean of the college faculty. The ceremony of presenting the diplomas was performed by President Bullock, and after they had been presented the special prizes were then announced by Professor Remington, and much applause was elicited by the fact that two of the prize winners, Bertha Leon DeGraffe and Olive Curtis Johnson, were the first women students who have been successful in attaining such honors. The valedictory address was delivered by Edwin S. Bastin, professor of materia medica and botany of the college.

#### THE LIST OF GRADUATES.

The graduating class of 1896 is as follows:

##### PENNSYLVANIA.

Charles E. Alexander, Louisa H. Aszmann, Harry Arndt, Jr., Hermann L. Baer, Francis J. Barbieri, Wesley J. Barrett, Fremont K. Bartho, Irwin A. Becker, George I. Bensinger, Alfred H. Bolton, Jr., William E. Boose, John C. Boyer, Elmer G. Brugler, David A. Buehler, Marcus Buss, Harry A. Carman, James W. Cassel, Isaac N. Catherman, William W. Collier, John H. Collins, William S. G. Cook, James H. Crumble, George M. H. Beemer, William H. Dewees, Charles S. Dickinson, Pierce A. Dietrich, Benjamin Dill, Joseph W. Ehnman, Martin E. Farrell, Charles T. Farrow, Harry Felker, Frederick F. Fischer, Samuel W. Fitzgerald, John B. Flenniken, Franklin W. Fieck, Josiah K. Freeman, Robert E. Gabriel, Walter S. Geiger, Lee Goldsmith, Robert F. Good, Harry E. Graham, James A. Griesemer, Charles M. Griswold, Charles R. Haig, Jr., Robert C. Hall, George H. Hance, Frank W. Hannan, Walter Hayman, Adam B. Heckerman, Edgar F. Heffner, Frank W. Heimbach, Edwin F. Hellyer, Jonas E. Heyser, William J. Hiffmeyer, Harry B. Hippler, Frank D. Hodil, James Stephens Holp, Jno. E. Howard, Albert N. Humpton, Warren E. Hunt, Thomas Jackson, Robert R. James, Olive C. Curtis, Thomas M. Jones, Charles E. Kelchner, Martin Ketterer, Frank Kline, Charles C. Kunz, Henry J. Lachenmayer, William I. Laucks, William R. Lautenbacher, Harry F. Lee, David M. Leech, Harry C. Leslie, Howard H. Lewis, James R. Light, Charles H. Longmire, Leon F. Luburg, Paul L. McConomy, James H. McCracken, Walter G. McHenry, Charles G. Marshall, Charles H. Meredith, Abram L. Metz, John H. Miller, John C. Montgomery, F. A. Mosebach, John Musselman, David H. O'Donnell, Edward L. Page, Edmund B. Pellett, Herman J. Pierce, Charles R. Place, Charles B. Powell, Arthur B. Reed, James W. Reeve, Jay W. Rewalt, William H. Ricker, Charles T. Roach, Raleigh Robinson, Hunter A. Sallada, Harry J. Schad, Otis O. Schaeffer, Joseph A. Schmiegel, Harry S. Schurman, J. P. E. Scott, Walter S. Sellers, Frank P. Semmel, Jr., Warren R. Sharp, John B. Shenk, Robert S. Sherwin, Willard E. Simpler, Loerey W. Sisler, John R. Smith, Paul Smith, George B. Spath, Albert O. Spotts, Merrill L. Steadman, Howard F. Stine, Edward C. Stout, Freeman T. Stroup, A. F. M. Stump, Charles M. Swainbank, Alexander P. Thompson, John C. Thum, Jacob F. Tiefenbach, Paul J. Waldner, Fred S. Wasley, Jonathan I. Watson, Charles A. Weida, Herman D. Wissmann, Enos F. Woltman, John C. Ziegler, Aaron H. Zullinger.

##### NEW JERSEY.

Hannah F. Bartlett, Josiah B. Beckett, Joseph S. Clair, John E. Davis, Clarence M. Harris, William P. Ireland, Albert B. Johnson, John C. Jones, Ephraim A. Lloyd, Charles B. McLaughlin, Hillman G. Malsbury, John W. Pilgrim, Edward M. Post, James P. Pulsifer, Neale Richardson, Frank B. Ross, Alexander Shreve, H. De Forrest Stephens, James D. Townsend, Lewis R. Whitacre.

## The Philadelphia College of Pharmacy.

Close of a Year of Remarkable Prosperity—Two Hundred and Nineteen Students Graduated—Six Lady Graduates—Award of the Procter Gold Medal.

On April 13 the exercises preparatory to the commencement of the Philadelphia College of Pharmacy were begun and it was not until Wednesday night that the graduates were allowed to depart to their homes. The exercises were opened on Monday evening by the Alumni Association holding its thirty-second anniversary meeting, at which Pres. John S. Beetem delivered his annual address. Officers for the ensuing year were elected as follows:

President, Dr. J. Louis D. Morrison, '88; first vice-president, Harry L. Stiles, '85; second vice-president, James C. Perry, '91; treasurer, William Lincoln Cliffe, '84; secretary, William E. Krewson, '69; corresponding secretary, F. William E. Stedem, '82. Board of Directors—For two years, Jacob S. Beetem, '78; Cornelius E. Spenceley, '78; for three years, Wallace Procter, '72; C. Carol Meyer, '73; William A. Bullock, '86; Theodore Campbell, '93.

In the evening the

#### RECEPTION OF THE SEVENTY-FIFTH GRADUATING CLASS

was held in Association Hall, which was handsomely decorated with flowers, the national flag and festoons of blue and white, the college colors.

#### PROCTER MEDAL GOES TO IOWA.

The Procter gold medal for the senior student and member of graduating class receiving the highest general average in the examination was awarded to Louis Peter Carstens, Davenport, Iowa, who was also the best junior last year. The value of this prize is such that it is not often awarded. Alumni prize certificates were awarded as follows: Pharmacy, John Henry Miller, Ephrata, Pa.; chemistry, Johann Heinrich Schroeder, Germany; materia medica, Edgar Franklin

Heffner, Centralia, Pa.; pharmacognosy (specimens), Joseph William Ehrman, Williamsport, Pa.; general pharmacy, Leon Kahn Baldauf, Henderson, Ky.; operative pharmacy, Miss Olive Curtis Johnson, Danville, Pa.; analytical chemistry, Aaron Henry Zullinger, Chambersburg, Pa.; microscopical botany (vegetable histology), Robert Suthers Sherwin, Scranton; for the best collection of indigenous plants, to Albert William Stahel of Roscobel, Wis. The prize for the highest general average of the junior class was awarded to Clarence Osborne Snavely of Lebanon, Pa. The annual class oration was by Charles Howard Meredith of Media, Pa.; the class historian, Charles Thomas Ink of Columbiana, Ohio; the class prophet, Kingsley C. T. Schneider of Berea, Ohio, and the class poem was read by Freeman Preston Stroup of Rouseville, Pa.

#### GRADUATING CLASS DINED BY THE FACULTY.

On Tuesday evening a banquet was given by the faculty of the Philadelphia College of Pharmacy to the graduating class of 1896 in the museum of the college, and it was a most enjoyable affair. The principal guests of the evening were the young lady graduates of the class, Miss Bertha DeGraffe, Miss Edythe Weston, Miss Olive Johnson, Miss Frances Bartlett and Miss Louise Aszmann, who were escorted to the banquet room by the assistant professors.

Four long tables extended along the length of the room and each was beautifully decorated. Prof. Joseph P. Remington, the dean of the college, presided, and after the 221 students had assembled around the tables, made a brief address, in which he invited all to sit down and enjoy themselves. After the dinner,

## OHIO.

Herbert S. Albaugh, Aaron W. Beeler, Frank B. Campbell, Luella Case, William Dutt, Edward D. Helfrich, Charles T. Ink, William M. Phillips, Verner E. Sager, K. C. T. Schneider, William E. Weiss.

## DELAWARE.

Albert Dougherty, Oscar C. Draper, Alfred L. Kelley, William S. Killiam, George C. Moore, Charles Schabinger, Calvin I. Swartz, Edythe Weston.

## MARYLAND.

Charles S. Cameron, Charles H. Haines, Harry R. Rudy, George B. Ryland, David P. Schindel, T. McGill Williamson, Bertha L. DeGraffe, George L. LeSage, Bradford A. Littlefield, Willets Wilson, Charles J. Zipp.

## SOUTH CAROLINA.

Frank B. Crayton, Charles F. Daniels, John G. De Lorme, Boyce Elliott.

## IOWA.

Louis T. Carstens, Lester D. Jones, James A. Miller.

## KENTUCKY.

Leon K. Baldauf, Arthur E. Knoefel, Therret B. Towles.

## MISSISSIPPI.

James L. Booth, Merry O. Martin, M. McInnis Watkins.

## MISSOURI.

Harry E. Arcularius, Milo M. Haymaker, Albert Herzog.

## WISCONSIN.

George L. Genz, Albert W. Stabel, Charles N. Jacoby.

## COLORADO.

Murff F. Maples, George A. Molsen.

## INDIANA.

Thomas R. Stephens, George F. Wild.

## KANSAS.

Theodore C. Bode, Julius F. Seyforth.

## VIRGINIA.

Walter Armstrong, William H. Booth.

## WEST VIRGINIA.

Herbert D. Harrell, Morris C. Thursh.

## GEORGIA.

Charlton G. Johnson.

## ALABAMA.

Benjamin L. Young.

## CONNECTICUT.

Howard E. Parker.

## MAINE.

William L. Mountaine.

## GERMANY.

August J. Meier, Johann H. Schroeder.

## SCOTLAND.

James Craig.

## RUSSIA.

Pinkas Robno.

In addition to the granting of diplomas to graduates, certificates of proficiency in chemistry were awarded to Irwin A. Becker, William J. Dovie, Warren W. Flitcraft, Clarence B. Gowen, John C. Ziegler.

## OHIO.

CINCINNATI, OHIO, April 20. —The twenty-fourth annual commencement exercises of the Cincinnati College of Pharmacy were held at the Scottish Rite Cathedral in this city on the 15th inst. A class of 25 was graduated. The exercises consisted of addresses on behalf of the Faculty and the Board of Trustees. A prayer by Rev. Joseph D. Meinzer of the Holy Cross Church opened the exercises of the evening. Hon. Howard Ferris made an address on behalf of the Board of Trustees, and Prof. Hamilton C. Ulen made a fitting speech on behalf of the faculty. John Ruppert, Esq., presiding officer of the college, also made an address.

The class was composed of the following persons:

John D. Fall, Cleveland, Ohio; M. J. Ullmann, Cincinnati; Edward Meyer, Wapakoneta, Ohio; J. H. Cline, Albany, Ohio; A. F. Schickner, Cincinnati; E. C. McCullough, Osgood, Ind.; H. B. Rattermann, Cincinnati; G. A. Theobald, Cincinnati; Ralph Freiberg, Mt. Vernon, Ind.; Jacob Bonner, Hamilton, Ohio; Carl Markt, Hamilton, Ohio; W. A. Miller,

Cheviot, Ohio; Nicholas Blank, Newport, Ky.; D. J. A. Stantebeck, Covington, Ky.; E. A. Stantebeck, Covington, Ky.; Ralph Goodall, Versailles, Ohio; J. H. Messmer, Lebanon, Ohio; Wm. Willeke, Cincinnati; Elmer Evans, Lebanon, Ohio; A. E. Wagner, Marietta, Ohio; John Steinko, Indianapolis, Ind.; F. C. Vogel, Geopinger, Germany; B. A. Woerther, Cincinnati; E. G. Darney, Guyandotte, W. Va.; J. A. Williams, Cincinnati; Andrew Panzer, Lawrenceburg, Ind.; William Schneider, Cincinnati.

The members of the faculty, Prof. C. T. P. Fennel, Dr. Julius H. Eichberg, Prof. W. Simonson, Prof. Adolph Leue, Dr. L. Cameron, Prof. Theodore Wetterstroem and Prof. Hamilton C. Ulen, occupied seats on the stage, and the graduates were seated in a semicircle below, all attired in full evening dress.

Prof. H. C. Ulen made an address on behalf of the faculty and Prof. John Ruppert, president of the college, awarded the diplomas and made a few timely remarks to the graduates.

This was followed by the awarding of the prizes, the donors presenting their respective ones as follows:

College gold medal, F. C. Vogel.  
College silver medal, William F. Vitter.

Fennel gold medal, Ralph Freiberg.  
Eichberg gold medal, Elmer Evans.  
Wetterstroem prize, set of Squibs Ephemeris, E. C. McCullough.

The exercises were interspersed with music.

## THE BANQUET.

At the conclusion of the exercises there followed the annual banquet and dance. Two hundred guests assembled around the banquet board and partook of the elaborate dinner served.

Dr. Julius H. Eichberg acted as master of ceremonies, and toasts were given as follows:

The Pharmacists of Cincinnati—Hon. J. A. Caldwell. The Medical Profession—Dr. C. A. L. Reed. The Legal Profession—Jas. R. Foraker, Esq. The Press—Hon. Louis O'Shaughnessy. For the College—Prof. J. U. Lloyd. The Alumni Association—Frank Freericks, Ph.D.

Prof. Charles T. P. Fennel was in charge of the banquet, and so perfect were the arrangements that every individual guest was personally cared for. Dr. Louis Sauer and Dr. Louis Klayer added materially to the success of the occasion by their personal supervision.

## THE ALUMNI MEETING.

The annual meeting of the Alumni Association was held during the afternoon, which was attended by a large number of former scholars from several States. A social session of some length was held, during which addresses abounding in mirth and humor were made. The election of officers for the ensuing year resulted as follows:

President—Prof. C. T. P. Fennel. Vice-Presidents—Valentine Freiberg, Henry Rattermann. Secretary—William Willaek. Treasurer—Emil Heun. Executive Board—G. A. Theobald, J. H. Cline. Editor Journal—Dr. Julius Eichberg.

The election of Professor Fennel to the presidency of the association is a high compliment to him, inasmuch as he has for several years been subjected to the opposition of a faction possessing considerable strength. He is thus entirely vindicated, and has brought about a reconciliation and reuniting of the ranks of the association.

## THE FIG SYRUP CASE.

In the case of the California Fig Syrup Company vs. Frederick Stearns & Co.,

the decree of the lower court was affirmed by Judge Taft of this city on the 14th inst. Held, that the term of Syrup of Figs is a descriptive one when applied to a medicine and indicates the active medicinal quality of the fig, and that therefore no one can acquire the exclusive right to use the same as a trade-mark to designate such medicine.

## THE BOARD OF PHARMACY EXONERATED.

Governor Bushnell, after a careful inquiry into the facts, the other day, completely exonerated the Ohio State Board of Pharmacy in the matter of the charge that that body had exceeded its authority in the matter of charging an examining fee. Accompanied by Mr. Fred Herbst, of the Legislative Committee of the organized pharmacists, Secretary Ogier of the State Board called upon the Governor with his books and papers and made a full statement of the real facts in the premises, completely refuting the attacks of the disappointed applicants and druggists. After the hearing Governor Bushnell reappointed Charles Krone of Hamilton as a member of the board for the full term of five years. This was a ratification, so to speak, of the official finding in the investigation, for had Mr. Krone been turned down the other members of the board would have been requested to resign. The local druggists are feeling jubilant over the result, as it means an indorsement of the effectual work done by the board to elevate and honor their profession. Mr. Krone, the reappointed member, is a leading druggist of Hamilton, and he had the indorsement of the druggists throughout the State.

Thomas Coons, a young druggist of Edinburg, Ind., committed suicide on the 6th inst. by taking prussic acid. He kissed his wife and baby good-by at the dinner table and remarked that he was going to the store to take poison, but his wife thought that he was joking. No cause is known for the rash act of Coons, as he was fairly prosperous and was backed by wealthy and influential friends. The deceased was a Mason in good standing.

## News Items.

J. H. Klapacke has sold his drug store on Clark street to Herman Kottman.

Charles W. Smedley, formerly in the drug business in Cumminsville, is short \$168 in his accounts as administrator of the estate of August Kirtwig.

Harris, Whittaker & Ruckstall is to be the name of a new drug commission house in St. Louis. Bart Whittaker of this city will be one of the firm.

Joseph Feth, a well-known druggist of Newport, was excused as a juror in the Pearl Bryan murder case on account of his profession. Druggist Foertmeyer of Bellevue is to be a witness in the case.

Covington druggists are said to be collecting evidence against saloon keepers of that place who keep open after midnight. It is not stated just why the "pill rollers" are interested in the doings of saloon keepers.

Robert Koehler, an ex druggist, traded a lot on Elm street for a drug store in Cumminsville. John Miller, who traded the store, now repudiates the deal and Koehler sues in replevin to recover the store, which is opposite Albert Keinging-er's place.

There is a large demand for Prof John Uri Lloyd's latest book, "Etidorpha."

The third edition of this remarkable work was exhausted in less than a week, and the fourth edition of 1,000 copies will soon be put upon the market. The publishers cannot turn out the work fast enough for public demand.

The Blackburn pharmacy bill, intended to strengthen and simplify the present law relating to the regulation and examination of pharmacists, failed to pass the Legislature on the 14th inst. The members did not understand the measure and it will be reconsidered soon. The author of the bill is the Republican nominee for State Dairy and Food Commissioner to succeed Dr. McNeal. His portrait was published in our last issue.

### Druggists and the Cleveland Centennial.

"CLEVELAND, April 20. - Cleveland druggists are scarcely taking as much interest as they should in the coming centennial celebration of Cleveland, to be held this summer. So much those who have been seen in regard to the matter themselves admit.

#### COMMITTEE OF DRUGGISTS APPOINTED.

A meeting was held on Thursday, April 16, to take steps toward furthering the pharmacists' part in the centennial, and the following committee was appointed to solicit funds, and given instructions to "hustle": East Side—John C. Gleim, Frank C. Oster, Eugene R. Selzer, E. C. Lane, C. E. Rennecker, Willard M. Fox, Carl Krebs, W. H. Flood, Frank L. Nydecker, David W. Sherwood, John Krause, John A. Bartlett, Samuel Aubley. West Side—Dr. James A. Ingraham, Maxwell Tielke, Henry F. Fisher, John Lehr, Otto Zickes, Fred. W. Stecher, Carl Schmidt.

#### THE MEETING OF THE OHIO ASSOCIATION.

The opening date for the annual meeting of the Ohio State Pharmaceutical Association, to be held at Put-in-Bay, has been set for June 30. It is now rumored that the second day of the meeting is to be "Cleveland Day," which Cleveland pharmacists are planning to make "the" day of the gathering.

#### CLEVELAND DRUGGISTS WOULD TESTIFY.

Now that the bombardment of Commissioner McNeal has recommenced at Columbus, there are several Cleveland druggists and grocers who are expressing a willingness to give some valuable testimony in regard to their own experiences with the "poor" food laws. It has been several times pertinently suggested that the investigation be removed to Cleveland, as it was to Cincinnati, for a few days, and if sufficient pressure is brought to bear by the Cleveland business men who are aggrieved at their past treatment, it is not improbable that such a course may be adopted.

### News Brevities.

H. R. Kelley of Galion has sold out to L. M. Leggett, of the same place.

George H. Worthington, secretary and treasurer of the Beeman Chemical Company, is very low with typhoid fever.

The Stutz drug store, at Bucyrus, has been sold to F. W. Deutsch of Akron, Ohio. Associated with Mr. Deutsch in the business will be D. E. Andrus, a registered pharmacist, formerly of Columbus.

A new pharmacy has been established at Akron by W. G. Hawn, and Charles Clay has opened a new drug store at Napoleon. Both houses bought their stocks of Strong, Cobb & Co. of Cleveland.

Druggists the city over are beaming as they watch the nickels flow in over their soda water counters. April 16, 17 and 18 have been the hottest spring days ever known here, and every fountain is reaping a harvest. Wholesale druggists report that trade is booming.

## MISSOURI.

### Increase in Missouri Registered Pharmacists.

ST. LOUIS, April 17.—Hardly had the echoes of the last special meeting of the Missouri Board of Pharmacy died away when the date of the regular meeting was announced. The board convened in Kansas City April 18 and on examination issued licenses to the following list of applicants: A. W. Benson, L. C. Gill, Earnest Hoernig, R. G. Hinton, C. W. Hodgson, T. H. Knapper, R. D. Richers, R. J. Sheppard, Robert Sorency and Theo. G. Tieman, of Kansas City; D. S. Alkire, Forrest City; Jefferson Burchett, Princeton; S. J. T. Davis, Bunceton; G. L. Daniel, Sweet Springs; Lee Z. Emmert and L. A. Kepner, Tarkio; H. I. Harris, Rich Hill; J. A. Kerr, Ulrich; J. T. Miller, Waldron; W. R. Minear, Lancaster; H. E. Thomure, Bontare; Virgel Winn, Henry Post Office, and W. G. Everett, O. S. Hiron, of St. Louis. Also the following from Kansas: P. W. Allen, Lawrence; W. E. Mayer, Atchison; O. T. Parker, Argentine; Herbert Randals, Kansas City; J. C. Rawles, Rosedale, and Thomas J. Smith, Liberal.

The proportion of successful applicants at this meeting was larger than at any previous one. In fact, the special meeting held in March was an exception all around. The examination was no more rigid than previous examinations, but the board had provided themselves this time with a revised set of questions and specimens. The next meeting of the board will be held in Sedalia in July.

#### ST. LOUIS COLLEGE GRADUATES MANY PHARMACISTS.

The commencement exercises of the St. Louis College of Pharmacy were held in the Germania Theater, April 16.

Following is the list of graduates:

Charles G. Arras, St. Louis; Joseph L. Boehm, St. Louis; Jesse D. Butler, Clarinda, Iowa; Lucius H. Dancy, Holly Springs, Miss.; Otto Ettmueller, Jefferson City, Mo.; Oscar H. Fischer, St. Louis; Henry E. Garthoffner, Boonville, Mo.; William F. Germann, Fort Smith, Ark.; Chris. F. H. Gross, California, Mo.; Emil H. Henckler, St. Louis; John B. Hicks, Zion, Ky.; Albert F. Kauffmann, St. Louis; George E. Kincaid, Muscatine, Iowa; Otto W. Konzelmann, St. Louis; Henry J. Kruse, Bethalto, Ill.; Charles L. Maggee, Watseka, Ill.; Arthur V. Marquardt, St. Louis; John H. Martin, Edwardsville, Ill.; Charles F. Merker, Belleville, Ill.; Harry Gordon Moore, Equality, Ill.; Rudolph L. Mueller, Collinsville, Ill.; George B. Murmann, St. Louis; James T. Nelson, Springdale, Ark.; Everett A. Oliver, Stoutland, Mo.; Abraham M. Pachter, Memphis, Tenn.; Alfred W. Pauley, St. Louis; Theodore J. Poppitz, St. Louis; Charles S. Roth, California, Mo.; Theodore Runge, St. Charles, Mo.; Adolph R. Scheu, Belleville, Ill.; Carl H. Schuh, Cairo, Ill.; Arthur M. Soellner, St. Louis; George H. Sommers, St. Louis; John C. Speers, Vinton, Iowa; Henry D. Spork, Hartington, Neb.; George W. Stiehl, St. Louis; Arthur C. Stoffer, St. Louis; John M. Swinney, Ash Grove, Mo.; John C. Thumser, St. Louis; W. Wade Van Sickle, St. Louis; Carl A. Vogt, Davenport, Iowa; Anthony B. Walker

Hermann, Mo.; W. Arthur Webster, Weatherby Mo.; L. Parker Wiggins, Hope, Ark.; Henry F. Winkelmann, St. Louis; Benjamin F. Zenk, Troy, Ill.

Special prizes were awarded as follows: Senior Class.—The Alumni Prize, a gold medal, for passing the best examination in all branches, was conferred upon Joseph L. Boehm, St. Louis. The second prize, a silver medal, awarded to John H. Martin, Edwardsville, Ill. The prize offered by the Oldberg-Wall Laboratory for the best examination in pharmacognosy, to Frank L. Whelpley, St. Louis. The prize offered by the Professor of Pharmacy for the best examination in theoretical pharmacy, was won by Arthur C. Stoffer, St. Louis. The Professor of Practical Pharmacy, for the best work in pharmaceutical laboratory, awarded his prize to Anthony B. Walker, Hermann, Mo., and Henry E. Garthoffner, Boonville, Mo. The Professor of Chemistry bestowed his prize in practical chemistry upon Frederick C. Simon, St. Louis. The Professor of Microscopy, for best examination in microscopical technology, awarded prize to George E. Kincaid, Muscatine, Iowa.

#### JUNIOR CLASS PRIZES.

The College Prize, a full set of lecture tickets to the Senior Class, for the best examination in all branches, was awarded to Carl G. Hinrichs, St. Louis. The Alumni Prize, a standard work on pharmacy, awarded for excellence in examination, was won by Walter Wittenberg, St. Louis.

After the exercises were over the faculty, trustees, graduates and a few invited guests sat down to dinner at the West End Hotel.

#### KANSAS CITY COLLEGE EXERCISES.

The commencement exercises of the Kansas City College of Pharmacy were held at the Academy of Music on Friday evening, April 10. In keeping with the school, this was a very modest affair. The hall was packed with relatives and friends of the graduates, faculty and students. Following is the

#### CLASS ROLL.

Miss Belle Cunningham, H. W. Hill, O. T. Parker, Dent R. Comer, W. J. Reese, R. J. Lyons, Fred. S. Clinton, Ernest Hoernig, F. C. Broderick, J. Syd. McNair, John Chandler, Fred. Baugh, Thos. J. Smith, Miss Nora B. Curtis, J. C. Rawles, Geo. Smith, G. S. Moore, F. L. Porter, C. E. Branstetter, T. C. Cole, J. G. Bunch, Theo. G. Tieman, Jas. C. Chambers, Harry E. Roland.

#### St. Louis at a Glance.

L. P. Hemm of Kirkwood is slowly recovering from a severe illness.

Paul Scholz has sold his store. Wm. Wehrenbrecht is now in charge.

The well-known firm of Fablen & Kleinschmidt of this city have sold their branch store at Memphis, Tenn.

Reports have it that a new drug store will soon be opened at the corner of Broadway and Guyer street.

H. J. Thierauf has sold his drug store at Morgan Ford road and Connecticut street.

A. W. Stiehl, Ph.G., former head clerk for F. W. Peeler, California and Park avenues, is now proprietor of that stand.

Ferd. Christman, Ph.G., has returned to Texas, after a brief visit to his old friends in St. Louis.

Robert P. Kettenbach was married on the 7th inst. to Miss Louise Hoehle of this city.

Chas. Hahn, Ph.G., for some time with F. C. Pauley, has purchased the drug store at Twenty-fifth and Salsbury, formerly owned by J. F. Brockman.



Golden City, Mo., is shaking up one of its pharmacists for alleged illegal sale of whiskey.

Alfred G. Wittman, Ph.G., is behind the counter once more at Bredemeyer's pharmacy, 8826 South Broadway.

Wm. Wehrenbrecht has returned from St. Paul, where he has been for several months, and will probably embark in the drug business at this point.

Albert Koch, the hustling young druggist at John and Florissant avenues, has just undergone a surgical operation on the eyes. He is getting along very nicely.

W. Oldendorf has resigned his position at Fahlen & Kleinschmidt's store, at Memphis, Tenn., and has taken up the position he formerly held.

Julius Paulus has resigned his position with the Meyer Bros. Drug Company, and gone with the Anti-Monopoly Drug Store, Sixth and Market streets.

Harry Goodyear, the son of a prominent Memphis druggist, and of an honorable old Southern family, was found dead in his bed in this city on the 4th inst.

J. H. Cherzinger, Ph. G., may now be found behind the prescription counter of Dr. J. L. Pfeffer's drug store, 1050 Lafayette avenue.

Ambrose Mueller, having finished his junior year at the medical college, will clerk during the summer for L. P. Hemm, a prominent pharmacist of Kirkwood, Mo.

Wm. Oldendorf has returned to Memphis, Tenn., after his sad visit to Waterloo, Ill., and his short stay in St. Louis. Mr. Oldendorf was called to his old home by the death of his mother.

Henry Hissa, Ph.G., has resigned his position at Adam Roth's drug store, and is now clerking for N. Z. Hornsby, 6521 Michigan avenue. Mr. Hissa is an enthusiastic bicycle rider.

Emiel Kuenster, who sold his drug store at Compton and Shenandoah streets a short time ago, is now proprietor of the Oriental Pharmaceutical Company, with headquarters at Fourteenth and Olive streets.

At one of the leading medical colleges in this city a last year's graduate in pharmacy made the highest record in the junior class. His name is O. A. Wall, Jr. Several other Ph.G.'s came out with very creditable grades.

Ed Drace, Ph. G., has returned to the city once more. After clerking in various cities and towns throughout the State, he has taken a position as prescription clerk at the Clinton Pharmacy, Grand and Finney avenues.

Lambert Pharmacal Company have elected the following officers at the annual meeting: John D. Winn, president; Arthur R. Deacon, secretary; A. W. Lambert, treasurer. Directors: J. D. Winn, A. R. Deacon, A. W. Lambert, A. B. Lambert.

J. S. Proctor and Mrs. Lena R. Powers were united in marriage at Clayton, Tuesday, February 11. Mr. Proctor is the well known druggist at Twenty-first and Olive streets. His many friends had given him up as a hopeless case of old bachelorhood.

It is definitely settled that a new drug store will be opened at Twenty first and Olive streets in the near future. The

lease has been closed, and the order for fixtures placed. The promoter of the enterprise is a well-known West End pharmacist.

Many of the younger St. Louis druggists will be pleasantly surprised to hear that Samuel Bracy, Ph.G., of Hope, Ark., was recently married to Miss Katherine McCrae of Mt. Holly, Ark. Mr. Bracy has many friends among the St. Louis boys.

Theo. Larwill, for some time with the Anti-Monopoly Drug Company, Sixth and Market streets, has resigned his position at that stand and started in business for himself. He recently purchased the old Rosenbach pharmacy, under the Barnes Medical College.

A veteran St. Louis druggist died the other day. Fred Lucas was a thriving pharmacist 20 years ago. He was prominent for many years in local newspaper circles. For the last five years he was private secretary to the chief of police of this city.

Leo J. Beale writes from Fort Smith, Ark., that he is head clerk in one of 18 stores located in the same street and within 14 blocks. He does not say "that is the only place to see life as it is," or advise any of his friends to come down there for the purpose of drug clerking.

C. B. Pooler, a drug clerk at Santa Rosa, Cal., and Miss Ethel Hardin, daughter of a Nevada cattle king, were united in marriage at San Francisco a few days ago, and are now permanently located in St. Louis. Mr. Pooler holds a position in one of the wholesale drug houses of this place.

Dr. A. S. Barnes of the Clinton Pharmacy has been bothered a great deal lately by petty thieves who steal from his barn, residence and store. The doctor had a lively chase down an alley after one a few days ago, but the chicken thief seemed to be a pretty good hand at getting out of the way.

Chas. Bredemeyer, the well-known druggist at 8826 South Broadway, is making preparations to spend the summer in Europe. His wife and eldest daughter will accompany him. During his absence the store will be in charge of his competent and faithful clerk, Mr. Wittman.

New colors are now waving at Broadway and Market street. A business transaction changed the name of that store from the Fernow to the Star Drug Company. The former proprietor has embarked in the exclusive manufacture of his own preparations, on which he has built up an extensive trade and wide reputation.

The annual election of officers of the Meyer Bros. Drug Company was held on Saturday, March 15. The old officers were re-elected, and the office of assistant treasurer was created. The officers of the firm are as follows: President, C. F. G. Meyer; first vice president, Theodore F. Meyer; second vice president, F. G. Meyer; secretary, G. J. Meyer; treasurer, C. W. Wall; assistant treasurer, W. H. Graham.

The Sohn Pharmacy, Twenty-eighth and Morgan street, was sold at a bargain a few days ago. For some time Mr. Sohn has been interested in Elixir Vigorans, and evidently found it more profitable

than the retail drug business. He has sold his store and gone to New York City, where he will henceforth use his talent and energy in pushing Sohn's Wine of Hypophosphites Compound, which, we understand, has taken the place of Elixir Vigorans.

### Missouri Board of Pharmacy.

A special meeting of the board was held at the request of the students of the St. Louis College of Pharmacy and others, on March 28, in St. Louis. Sixty-seven candidates were examined, of which the following passed:

C. G. Arras, C. E. Denton, L. H. Dancy, W. S. Garvin, W. E. Gerke, Geo. Graf, J. B. Hicks, O. W. Konzelman, A. F. Kauffmann, E. A. Lemmer, J. A. Mager, C. C. Martin, Theo. L. Miller, H. G. Moore, J. T. Nelson, E. A. Oliver, A. R. Schew, Carl Schuh, A. M. Soellner, F. C. Simon, J. C. Speers, L. D. Vandivort, W. W. Van Sickle, H. F. Winkelmann, Val. F. Willet, B. F. Zenk of St. Louis, and R. W. Lanning of St. Genevieve.

The board passed a vote of thanks to the Meyer Bros. Drug Company for courtesies extended to the board.

The next meeting of the board will be held at Kansas City, on April 18, and the next following meeting will be held at Sedalia on the second Monday in July. For further information, address F. W. Sennewald, secretary, St. Louis.

### ILLINOIS.

#### THE SEARLE & HERETH CO. ENTERTAIN.

A series of receptions have been given to the graduating classes of the various pharmaceutical and law colleges of Chicago by the Searle & Hereth Company. They entertained the graduating class of the Chicago College of Pharmacy recently, and on the 9th inst. entertained the College of Physicians and Surgeons, and the Physio Medical College on the 10th inst. The visitors were conducted through the extensive laboratory of the company by the officers and shown every detail connected with the manufacture of their various lines and specialties. During the first week in May a reception in honor of the graduating class of Rush Medical College and the Chicago Medical College will be given. This manner of acquainting the medical and pharmaceutical profession with the line of goods manufactured is appreciated by all.

#### ENLARGING THEIR FACILITIES.

Buck & Rayner's store at the corner of Madison and State streets has been entirely refitted and the new front makes it very attractive.

The buildings occupied by the Liquid Carbonic Acid Manufacturing Company are being enlarged to meet the demands on their business. An additional story is being added as well as an extension which will be used for offices.

The upper floor, 60 by 40, will be devoted to the crushed fruit, fruit juice and extract department, of which this company make a full line.

#### VERDICT FOR DRUGGIST BECKER.

Henry V. Becker, a druggist, was awarded \$2,000 damages by a jury in Judge Hutchinson's court recently for alleged malicious persecution. In October, 1892, Becker had an account with Wingler & Mandell for cigars purchased. The firm said he owed them a balance and obtained judgment in a justice court, upon which a capias was issued and Becker

was arrested one Saturday evening and left in the county jail until Monday morning. Becker insisted that the arrest was unwarranted and sued for \$25,000.

A. Edward Renwick, the Western manager for William R. Warner & Co., will be married at Wooster, Ohio, on Wednesday, April 29, to Miss Maude Coe, daughter of James F. Coe of Wooster, Ohio.

#### PALMER DRUG COMPANY FAILS.

A confession of judgment by the Palmer Drug Company and Hosea W. Palmer resulted yesterday in the closing of the drug store at Jackson and State streets. The judgment was for \$3,211 and was in favor of the Commercial National Bank of Chicago. The Palmer Drug Company made an assignment to James J. Barnour.

J. F. McLean has opened a new drug store at 6428 Stoney Island avenue.

C. W. Shack will open a new drug store at the corner of Peoria and West Randolph streets, May 1.

Elkins' drug store at the corner of State and Van Buren streets will be closed at the end of this month, as the proprietors are retiring from business.

R. S. McLennan has sold his drug store at 824 West Madison street to R. Gillespie, who also conducts a pharmacy at the corner of West Harrison street and Centre avenue.

Whitall, Tatum & Co. removed their office from 221 Randolph street to 196 Randolph street last week. The new premises give them the much needed room for the growing Western trade.

Finding that his drug store requires more of his personal attention, T. V. Wooten has resigned his position as manager of the United States Pharmacal Company. He is succeeded by H. W. Snow, who was until recently employed by the Meyer Bros. Drug Company, St. Louis. Mr. Snow is a graduate of the University of Michigan and was for eight years with Frederick Stearns & Co.

### MICHIGAN.

Dr. Dennis J. Seaman, the Detroit physician and druggist who was sent to the State prison at Jackson to serve a ten years' sentence for the murder of Emily J. Hall by a criminal operation, is said to have spent \$3,000 trying to clear himself.

A. H. Webber, one of the leading druggists in Northern Michigan and manufacturer of proprietary medicines at Cadillac, Mich., will on May 1 commence the building of a fine business block in that city to be occupied by himself in a wholesale and retail drug business.

Wallace D. Ballou, a well-known young Grand Rapids, Mich., druggist, died last week of inflammatory rheumatism. He had a wide circle of acquaintances in that city. He was a partner in the Bridge street drug firm of Ballou & Elferdrink, and was a stockholder in the mills of the Ballou & Winchell Paper Company. He was regarded as a rising young man in business circles, and his untimely end is regretted by all.

George W. King, the Muskegon druggist, who figured in a sensational murder trial, and who was charged with burning his drug store for the insurance, has

brought suit against Attorneys F. W. Cook of Muskegon and James O'Hara of St. Joseph, the Grand Rapids Fire Insurance Company, Detroit Fire & Marine Insurance Company and the Westchester Fire Insurance Company. He says that previous to his trial, having no money, he transferred to the attorneys, as security, \$3,700 worth of policies of his burned drug store, and that they settled with the companies for half the amount of the policies without his consent.

Charles Fortier has been placed under arrest at Port Huron, Mich., on the charge of having conducted a drug store without having a registered druggist there. The defense claims that inasmuch as Mr. Fortier was once a registered pharmacist he is one to-day and should be granted a certificate upon paying the required fee. The defense in their argument also claim that the matter of his arrest is one of persecution rather than one of prosecution. They base their claims upon the following letter from a Detroit wholesaler:

We are sorry that we have to omit the patent medicines in your order to-day. We have cut them all out because your competitors have notified us that if we sold you they would not buy of us, inasmuch as you cut prices on same. We are sorry so to do, but we think you will understand our position in the matter, that we cannot risk losing the balance of the trade, so have taken this step. Would it not be better for you to get full prices and have a friendly feeling with your competitors?

### NOTES ON THE DRUG MARKET.

#### The Gum-Acacia Market.\*

It was to be foreseen that the warlike operations now commenced on the road toward Dongola would bring with them a speculative movement in the products of the Upper Nile region, one of the principal of which is Soudan gum. A sharp advance in that necessary and widely used drug actually set in last week, and for a while it seemed as if the days of 1883 were about to return. But somehow the movement has been damped, and at the present moment the market shows some signs of flagging. Probably the knowledge that there is a fairly large stock of acacia sorts available in Europe and Egypt has deterred many dealers from taking part in the movement; and it is also pretty generally recognized that the conditions are now widely different from those of 1882 to 1884, that the prospects of a renewed reign of anarchy in the Upper Nile regions and the enforced stoppage of trade between Egypt and Kordofan are remote, and that, even if history were to repeat itself, the supply of substitutes for Soudan gums—either in the shape of the natural products from the Senegal, Northern Africa and Arabia, or of artificial gums and gums rendered soluble by chemical processes—would be sufficient to prevent an advance of the nature of that which reached its maximum in 1887. It will be of some interest here to recapitulate succinctly the history of the last great rise in Soudan acacia gums, which began in the autumn of 1883, and lasted for several years. That advance was long in coming.

It was freely predicted in 1882, after the Arabi Pasha episode and our Egyptian campaign; but it did not then take place, because there were heavy stocks of gum available in London, Marseilles and

Trieste. A normal Soudan crop, in those days, was computed at 60,000 bales, and the price of fair sorts averaged from 40 to 50 shillings per hundredweight. The imports into Trieste in 1881 amounted to no fewer than 16,843, the exports to 19,228 packages. Even in the summer of 1883 fine Alexandrian sorts could still be purchased in London at 52 shillings 6 pence to 55 shillings per hundredweight. In September of that year, however, a sudden advance to 80 shillings per hundredweight took place, the features of which were much the same as those of the recent rise.

In the beginning of 1884 the Mahdi's successes, culminating in the fall of Khartoum, finally cut off the Soudan from European commerce. Soudan sorts rose to 110 shillings per hundredweight, only to decline again to 80 shillings per hundredweight within a few weeks. From that period, however, they once more steadily advanced. The Nile trade-route was closed, commerce with the Red Sea ports was drying up, and nothing but stray rumors reached Europe of the state of affairs in the country on the western bank of the White Nile, which produces the bulk of the Soudan gum of commerce. Early in 1885 "Turkey sorts" were quoted at 120 shillings per hundredweight in Mincing Lane.

By January, 1886, the quotation had risen to 220 shillings per hundredweight, and, had it not been for the growing arrivals of gums from other sources, the price would probably have been much higher still, for the markets had in the meantime been swept bare everywhere. The stock of Soudan gums in Trieste, the principal continental port, decreased from 855 packages on January 1, 1885, to 8 serons on January 1, 1886.

In Bordeaux, the chief center of the Senegal gum trade, a syndicate had been formed which, for a considerable time, succeeded in keeping the price of that variety—which forms one of the best substitutes for Soudan gum—at a fancy price. Meanwhile, however, enormous supplies of more or less useful gums were being poured upon the European market from British India, from Morocco, and from other parts. Gebzirah gum began to arrive freely from Kassala, via Massowah, on the Red Sea, and was found a fairly good substitute for the Soudan article. In the second half of 1886 no fewer than 3500 packages of this variety found their way to Trieste; in the year 1887 10,249 serons of Gebzirah gum were landed at that port.

Meanwhile, however, true Soudan gums became scarcer and scarcer, packages occasionally offered at the London auctions were regarded as curiosities, and those who wanted them had to pay prices never known before. In January, 1887, sorts realized 840 shillings, picked gum 600 shillings per hundredweight. In the early months of 1888 much the same prices still ruled, although it was rumored that the Soudan would shortly be reopened to trade, and that considerable supplies of gum were already on their way to Wady Halfa, the southernmost Egyptian outpost. Not until 1890, however, was the Soudan officially reopened to commerce, and in the summer of that year several small parcels were brought to market in Cairo. Little by little Soudan gums began once more to be seen on the European markets, and for the last two years the supply has been as great as, if not greater than, ever, prices gradually falling to their old average.

\* The Chemist and Druggist.

## Chemicals.

The monthly prices current of the Roessler & Hasslacher Chemical Company, manufacturing and importing chemists, 78 Pine street, New York, and 56 Fifth avenue, Chicago, issued under date of April 8, contains the following reference to the business of the past month:

The past month's transactions have been limited to actual wants, and as these wants have kept within narrow limits, business has a rather quiet appearance. Values have not changed appreciably; the tendency, however, in view of the general situation, is, with some exceptions, weak. The position of certain staples is referred to as follows:

*Acetanilid* continues unchanged in price, the demand being only moderate. *Aniline Oils and Salts*.—Although the demand is light the tendency for better prices has developed in this market, which, however, is still considerably below the importing level. *Caustic Potash*, "Electron Brand," solid, 90 per cent. KOH. This product is of superior and reliable quality, being produced by electrolysis. It is much more economical and therefore cheaper than the lower grades. Please write for a circular and prices. *Cyanide of Potassium*, 98-99 per cent., is lower in price. *Peroxide of Sodium (Peroxygene)*.—We are on the point of issuing a new circular with revised directions and recipes, based on successful practical bleaching operations. We will send copies upon application. *Prussiate of Potash, Yellow*, continues low in price. We solicit your inquiries when in the market. *Salicylic Acid*.—A decided rise in the raw material, Carbolic Acid, has forced an advance, which will be maintained. At the same time this change in the price of the raw material leaves still some room for further improvement in the finished product. *Quinine* remains unchanged, the market still having a surplus supply.

## Wholesale Druggists' Prices.

The fluctuations in the prices at which retailers usually purchase goods in ordinary sized lots have been few and unimportant. Advances have occurred in salicylic acid and berberine, while a lower range is quoted for benzosol, bismuth subnitrate, caffeine and cocaine hydrochloride.

## Review of the Wholesale Market.

NEW YORK, April 23, 1896.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

During the past fortnight there has been a noticeable improvement in the demand for most lines included in the departments of Drugs, Dyestuffs and Chemicals, and the volume of business has been better than the corresponding period of last month. The condition of the market, so far as prices are concerned, reflects little change, and where changes have occurred the advantage has been pretty evenly balanced between buyer and seller. The military operations of the British and Italian Governments in the Sudan have affected the position of Gum Arabic and Alexandria Senna, both of which have recently advanced in price. Opium has advanced slightly since our

last, but speculation in the article is yet in abeyance, and the principal transactions have been between jobbers, there being little consuming inquiry to speak of. The advance in Salicylic Acid, noted in our last issue as due to the recent advance in the price of Carbolic Acid, has been maintained. Important fluctuations have occurred in Cocaine Hydrochloride and Bismuth Salts which are lower in price. The position of Camphor remains unsettled, nothing being definitely known as to the operations of the European Crude Camphor syndicate.

## ADVANCED.

Balsam copaiba,  
Opium,  
Camphor oil,  
Senna leaves,  
Cape aloes.

## DECLINED.

Bismuth salts,  
Cocaine,  
Oil of tansy,  
Castile soap,  
Orris root.

## DRUGS.

*Alcohol* is steadily maintained by trust producers at the previous range of \$2.38 to \$2.35, though a few sales to city buyers are reported at a fraction less, or, say, \$2.31.

*Balsam Copaiba* has materially advanced, Para being now generally quoted at 40 cents in jobbing parcels, while little, if any, can be obtained from importers at under 37c. The stock of all varieties here is small, Maranhão and Maracaibo being particularly scarce; the latter has advanced in the London market to 2s.

*Balsam Peru* is in better supply and easier, with \$1.90 to \$1.95 quoted from first hands; jobbing sales at \$1.95 to \$2.

*Balsam Tolu* is selling fairly within the range of 45c. to 47½c.

*Barks* have not varied in any important particular during the interval. Bayberry is in better supply and easier. Cascara Sagrada continues in fair consumptive demand with sales at 4c. to 4½c. to 5c. for new and old, respectively.

*Cacao Butter* remains quiet, with English offered and selling in single cases at 31c. Bulk Dutch is quoted down to 30c.

*Carnauba Wax* supplies have been closely concentrated and higher prices are now asked for all varieties. Sales of No. 1 are reported at 26c. to 27c., and No. 2 at 22c. to 23c. Holders now ask 30c. for No. 1, 25c. for No. 2, and 23c. for No. 3.

*Cassia Buds* are in slightly improved position, and higher prices are asked in some instances, though our figures will yet buy.

*Cinchonidine* has met with increased demand during the past few days, and owing to this, and a slight scarcity here, prices have been advanced by the manufacturers to 3c. to 3½c., the former being the lowest quotation from second hands.

*Cocaine Hydrochloride* is lower. Competition in the trade has forced the price down to \$3.75 to \$3.95, according to quantity. Ounce vials are quoted at \$4, ½-ounce at \$4.05, ¼-ounce at \$4.10.

*Cod Liver Oil* has not changed materially during the interval; the prices remain at about \$60 for ordinary brands of prime quality Norwegian and \$65 to \$68 for fancy brands, with, however, only a limited business passing.

*Colocynth Apples* continue weak and unsettled, with Trieste offering at 60c. to 65c., and Spanish at 28c. to 30c.

*Coumarian*, artificial, is likely to be lower as a consequence of increased manufacture and improvements therein. Manufacturers now quote \$9 to \$10, while natural is held at \$12.

*Cubeb Berries* are momentarily neg-

lected; small sales of XX stemless have been made at 9c., while 7c. to 8c. are common quotations for ordinary quality.

*Menthol* continues quiet, though prices are well maintained at the range of \$3.90 to \$4.

*Morphine* continues rather slow of sale and the market remains quiet. Orders for domestic are filled at \$1.50 to \$1.60 as to brand.

*Opium* has been marked up since our last, due to the receipt of strong cables from Smyrna. The business passing has, however, been very moderate, and not of a character to strengthen holders' ideas. The present quotation for single cases is \$2.05 to \$2.07½, though less would be accepted for lots of five or more cases. Recent cable advices from Smyrna indicate a weaker tendency in that market. Powdered opium remains at \$2.75 to \$2.80 for ordinary quality, and \$3.10 to \$3.15 for high test.

*Quinine* continues in fair demand at previous prices. P. & W. quote 30c. for large tins, while 28c. is generally quoted for other brands. Foreign in bulk is generally quoted at 26½c. to 27½c.

*Senna Leaves*, Alexandria, continue scarce and in demand with values held very firmly from 17c. for ordinary quality and up to 35c. for extra selected. Tinnivilly can be purchased at 6c. to 18c., according to quality.

*Soap, Castile*, is in better supply and lower; Conti's quoted at 9½c. to 9¾c.

## DYE STUFFS.

*Aniline Salt* is in slightly better supply, but the prices are unchanged at 12½c. to 13c., which appears to be inside for spot parcels.

*Blood Albumen* is in light supply and prices remain firm at from 28c., for inferior to 38c. for highest grade.

*Cutch* continues in fair jobbing demand with values easy at 5c. to 5½c. for bale goods, 5¼c. to 7¾c. box, and 8½c. slab, according to quantity.

*Gambier* is firmer with 4.05c. to 4.15c. asked, as to quality, for store goods.

*Sumac* is developing a little activity, though prices are nominally unchanged, \$49 to \$50 being asked for Sicily on spot, while Virginia is steady at \$38 to \$40.

## CHEMICALS.

*Acid Salicylic* continues in demand and firm at 48c. to 45c.

*Arsenic*, white, has hardened a trifle in the interval as a result of lighter supplies here and cables of higher prices in the foreign market. The lowest figures quoted here are 6¼c. for English and 6¼ to 6½c. for German.

*Bismuth Preparations* have been reduced in price by the manufacturers, as follows: Bismuth oxychloride, bulk, \$1 to \$1.05; sub carbonate, bulk, \$1 to \$1.05; sub nitrate, bulk, 85 to 90 cents; including 1 pound box, 92 cents.

*Borax* is meeting with a fair steady demand at our quotations. An advance is anticipated to meet the higher freight rate from California, which goes into effect May 1.

*Blue Vitriol* continues dull with prime qualities offered at 8¼c. in carload lots.

*Brimstone*, crude, offers more freely at a slightly slower range, say, \$15.50 to \$15.25 for unmixd seconds and thirds, respectively.

*Nitrate Soda* prices are well maintained on the basis of 1.70c. for round lots.

*Potassium Cyanide* prices have declined and 87c. will now buy 99 per cent.

*Quicksilver* continues firm and in demand at 51c. to 52c.

#### ESSENTIAL OILS.

*Anise* is meeting with a fair inquiry and this, coupled with a small supply, has the effect of maintaining prices with a fair show of steadiness at say \$2.45 to \$2.50.

*Bergamot* has eased off a trifle with \$2.50 quoted in most instances for high grade oil.

*Camphor* continues scarce and little, if any, is offered at below 15c. though we hear of some sales at about 18c.

*Cassia* is offered with more reserve, though values are unaltered, 70 test bringing \$1.95 to \$2 and upward; lower grade oil is jobbing at \$1.75.

*Citronella* continues weak and unsettled; round lots in drums are quoted at 88c., while tins are held at 40c.

*Clove* is steadier with few sellers, if any, of bud at less than 45c. for large packages, and 50c. generally asked for smaller quantities.

*Croton* has advanced in sympathy with a scarcity of both seeds and oil, together with higher markets abroad.

*Peppermint* is without new feature of interest. Western is quoted \$1.65, Wayne County \$1.80, and cases \$2.15.

*Natural Oil Sassafras* is quoted very firm within the range of 40c. to 42c. Ordinary artificial offers more freely at 80c. to 32c. in drums and tins, respectively.

*Safrol* continues scarce and held at 40c.

*Tansy* prices have been revised to \$1.65 to \$1.75. The revisions of our price list of essential oils show declines in myrrbane, rectified amber, pennyroyal and rose.

#### GUMS.

*Aloes*, Cape, has hardened, and 7c. is now quoted firm; Curacao is held at 8½c. to 4c.

*Arabic* continues held firmly at the recent advance.

*Camphor* is in rather better demand, but prices are without change; city refined held at 55c. per barrel, 56c. cases, and Japanese in 1-ounce blocks and 2-pound cakes, 60c. and 65c. respectively.

*Chicle* is offered less freely, with 36c. now asked for ordinary jobbing parcels.

*Senegal* is developing an upward tendency, with other Arabic gums, though prices are as yet quatably unchanged.

#### ROOTS.

*Gentian* is quiet and weak owing to offerings of new crop for forward shipment at lower rates; 5c. to 5½c. now represents the extreme range; new crop offers at 3½c.

*Jalap* has sold more freely during the past few days and all cheap lots of prime stock appear to have been taken up. Of such quality there is little stock offered at less than 11c., though 9c. to 10c. would probably be accepted for inferior.

*Orris* has weakened in the interval, and supplies of Florentine can be purchased at 15c. to 16c., and Verona at 13c. to 14c.

*Sarsaparilla*, Mexican, continues weak and unsettled, influenced by recent importations and a desire to realize. First bands quote 5c., and 5½c. to 5¾c. are freely quoted for jobbing parcels.

#### SEEDS.

*Anise*, Italian, is meeting with slightly better sale, several jobbing parcels changing hands at 5¼c. Spanish Anise has sold fairly at 8c., with the range at 8c. to 10c.

*Caraway* is rather slow of sale. Purchases can be made down to 6c. to 6¼c.

*Celery* continues easier, with spot supplies offering at 11½c.

*Coriander* is irregular and unsettled in face of pressure to realize. It was reported that round lots of unbleached could have been purchased at 2¼c., if not at a slight fraction less, for May shipment. Spot goods are quoted at 8c. to 8½c. and 8½c. to 4c. for bleached and unbleached, respectively.

*Mustard* is neglected at the moment, with only small jobbing sales of California yellow at 2¼c. to 2½c., and German at 2c. to 2¼c.

#### Pittsburgh College.

The annual commencement of the Pittsburgh College of Pharmacy was held at Carnegie Hall, Allegheny, April 17.

The names of the successful students are W. J. McAdams, Charles H. Schaefer, W. S. Vance, E. A. Rankin, Edward H. McMillan, F. R. Graham, F. G. Gable, W. F. Heidenreich, H. A. Steele, F. K. Deffin, J. D. P. Speer, C. M. Kelly, J. C. McMillin, V. A. Sandles, A. E. Soffel, P. A. Hellerbach, R. W. Henderson, C. M. Coleman, D. R. Lutz, W. S. Erskine and J. A. Faessel.

W. J. McAdams carried off first honor and Charles H. Schaefer second honor. Esther C. Hamilton will receive a certificate of proficiency in chemistry and materia medica.

#### Meeting of the American Medical Association.

The annual meeting of the American Medical Association convenes at Atlanta, Ga., May 5, 1896. The Southern Railway, "Piedmont Air Line," has arranged for handling the large delegation from the Eastern and New England States via Washington and thence over their system.

This is the only direct line from the East to Atlanta, and offers the most luxurious appointments in railway travel. It is the only line operating Pullman vestibuled trains, composed of dining and sleeping cars, between New York and Atlanta without change. The following schedule shows the double daily service from New York to Atlanta:

	Washington and Southwestern Southern Ry. Limited.	Fast Mail. No. 35.
Penn. R. R.	No. 37.	No. 35.
Lv. New York...	*4.30 p. m.	*12.15 a. m.
" Newark...	4.50 "	12.47 "
" Philadelphia...	6.55 "	7.20 "
" Baltimore...	9.20 "	9.42 "
Ar. Washington...	10.25 "	10.42 "
Southern Ry.		
Lv. Washington...	*10.43 p. m.	*11.15 a. m.
" Danville...	5.50 a. m.	8.05 p. m.
" Greensboro...	7.04 "	7.40 "
Ar. Salisbury...	8.17 "	9.12 "
Lv. Charlotte...	9.35 "	10.55 "
Ar. Spartanburg...	11.37 "	1.00 a. m.
" Atlanta...	3.55 p. m.	5.20 "

\* Daily.

Rates have been made for delegates

attending the meeting of the American Medical Association as follows: One full fare going, and on presentation of certificate at Atlanta having paid full fare, return ticket will be sold at one-third rate. For sleeping car reservations, or more detailed information, covering the "A. M. A. special," address any of the following: R. D. Carpenter, general agent, Alex. S. Thweatt, Eastern passenger agent, 271 Broadway, New York; Waldo A. Pearce, New England agent; Geo. C. Daniels, traveling passenger agent, 228 Washington street, Boston; John M. Beall, district passenger agent, 83 South Third street, Philadelphia; L. S. Brown, general agent passenger department, Washington, D. C.

These agents can also furnish information concerning special low rates in connection with the following events: The meeting of the Sons of Revolution, Savannah, Ga., April 20; American Medical Association, Atlanta, Ga., May 2; Methodist Episcopal Conference, Mobile, Ala., May 6; Gun Club Tournament, Memphis, Tenn., May 11; Woman's Board of Missions, Memphis, Tenn., May 17; Western Georgia Association, Chattanooga, Tenn., May 20; Royal Arcanum Supreme Council, Savannah, Ga., May 20.

#### Pharmacy Examinations.

The semi-annual examinations of the Pharmaceutical Association of the Province of Quebec for major and minor candidates were held in the College of Pharmacy, Montreal, commencing on Tuesday, April 14, and closing on Friday, the 18th. Twenty-five candidates presented themselves for the major examination and 23 for the minor. Of these the following, named in order of merit, passed: As licentiates of pharmacy, W. A. Smallwood, Jas. A. Gillespie, E. A. Ranson, J. Victor Levesque, A. Brillion, J. T. Gaudet, C. M. Du Gay, J. L. Roberge, Joseph Boutin, J. J. Power, P. Emile Chevalier, J. A. Labranche, J. A. F. Bertrand, A. Veilleux and A. C. Roy. As certified clerks, Willie Bernard, R. J. Lunny, James Frankum, C. S. Webb and E. Jolicœur. Owing to the Messrs. Smallwood and Bernard being ineligible to compete for the gold medal and minor prize respectively, Jas. A. Gillespie obtained the gold medal and R. J. Lunny the minor prize.

The candidates were subjected to a severe written and oral examination in materia medica, chemistry, botany, practical dispensing, reading of prescriptions and weights and measures.

The examiners were S. Lachance, A. E. Du Berger, R. W. Williams, W. H. Chapman and J. R. Parkin.

The next examination will be held in Laval University, Quebec, about the middle of October.

#### Iowa Pharmaceutical Association.

The approaching meeting of the Iowa Pharmaceutical Association is to be at Clear Lake (Iowa's famous summer resort), July 15, 16 and 17. Special rates are promised on all railroads. A large attendance is expected and being arranged for. Address Milo Ward, president, Des Moines; A. H. Miles, acting secretary, Des Moines, or John L. Etzel, local secretary, Clear Lake, for further particulars or for any information regarding this prospectively, the largest meeting ever held by this association.

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## THE NATIONAL FORMULARY.

SOME eight months after the report of the Committee on National Formulary was submitted to the American Pharmaceutical Association the revised work reached the members of the association and was placed upon the market. Presumably the manuscript was complete when submitted, and there seems to be some reason for the impatience expressed at the amount of time which elapsed between the submission of the manuscript and the publication of the work.

Now that the work has appeared, however, it will be very welcome. The value of the National Formulary may best be comprehended by observing that all the preparations dropped from this new edition of the National Formulary have, with the sole exception of the aromatic fluid extract of rhubarb, been introduced into the Pharmacopoeia, thus showing that the primary object of the work has been well accomplished.

The new preparations introduced are as follows:

Acidum Citricum Saccharatum, Acidum Tartaricum Saccharatum, Elixir Digestivum Compositum, Elixir Paraldehydi, Emulsio Olei Terebinthinæ Fortior, Extractum Rhamni Purshianæ Fluidum Aromaticum, Glyceritum Guaiaci, Liquor Auri et Arsenii Bromidi, Liquor Magnesi Sulphatis Effervescens, Liquor Zinci et Alumini Compositus, Pulvis Acetanilidi Compositus, Pulvis Effervescens, Sodii Bicarbonas Saccharatus, Syrupus Codeinæ, Syrupus Pini Strobi Compositus, Syrupus Rhei et Potassii Compositus, Tinctura Viburni Opuli Composita.

A number of preparations have also been introduced which, though official in 1890, have been dropped from the Pharmacopoeia of 1890, the National Formulary thus furnishing a stepping stone both for ascending to and descending from the Pharmacopoeia:

Acetum Lobeliæ, Acetum Sanguinaris, Amylum Iodatum, Ceratum Extracti Cantharidis, Ceratum Sabinæ, Charta Cantharidis, Emplastrum Ammoniaci, Emplastrum Asafetidis, Emplastrum Galbani, Emplastrum Picis Canadensis, Extractum Lactucarii Fluidum, Extractum Malti, Extractum Mezerei Fluidum, Infusum Brayeræ, Linimentum Cantharidis, Linimentum Plumbi Subaceticis, Liquor Gutta Perchæ, Liquor Pep-

sini, Mixture Magnesiæ et Asafetidis, Mucilago Cydonii, Pilulæ Ferri Compositæ, Pilulæ Galbani Compositæ, Spiritus Odoratus, Syrupus Ferri Bromidi, Tinctura Conii, Tinctura Ignatiæ, Trochisci Magnesiæ, Trochisci Sodii Santoninatis, Unguentum Acidi Gallici, Unguentum Mezerei, Unguentum Sulphuris Alkalinum, Vinum Album Fortius, Vinum Aloes, Vinum Rhei.

A few changes have been made in the titles of preparations, among which are noted the following:

Aqua Hamamelidis to Aqua Hamamelidis Spirituosa

Liquor Sodii Citro-Tartratis to Liquor Sodii Citro-Tartratis Effervescens (*Tartro Citric Lemonade*).

Mixtura Chloroformi et Opii to Mixtura Chloroformi et Cannabis Indicis Compositæ. The formula for this preparation is also changed.

Ferri et Quininae Citrus Effervescens, to Ferri Phosphas Effervescens.

Potassii Bromidum Effervescens to Potassii Bromidum Effervescens Cum Caffeina.

Sal Carolinum Factitum Effervescens, Sal Kissingense Factitum Effervescens, Sal Vichyanum Factitum Effervescens and Sal Vichyanum Factitum Effervescens Cum Lithio are each preceded by "Pulvis."

Pulvis Iodoformi Dilutus has been changed to Pulvis Iodoformi Compositus. Syrupus Ferri Arseniatis to Syrupus Ferri Arsenatis.

The use of the metric system is a step in the right direction, though, unfortunately, it will militate to a certain extent against the popularity of the work, for it will be objected to by that intensely conservative element which constitutes so large a proportion of the retail drug trade. For aid on the tabular portion of this notice we are indebted to Professor SCHIMPF of Brooklyn.

Notwithstanding the arduous labor already performed, the most important portion of the task yet remains to be done—namely, its popularization with the members of the medical profession. This is the task set for the State and local associations and for individuals. The New Jersey association, the Kings County society and a few other associations have already done good work along



this line. Let every association and every pharmacist aid in the work and then, and then only, will the full mission of the National Formulary be accomplished.

### OUR NEW GRADUATES.

**G** RADUATING classes all over the United States are now being admonished, by various gentlemen with assorted degrees, as to what their conduct in life should be. They are being told to aim high, etc.; and for the most part are being told this by men who have never been in a drug store except when they went to look at the directory or to purchase a postage stamp. A speaker at the Brooklyn College commencement deviated somewhat from the beaten track, and using sound common sense, told his hearers not to waste any time aiming, but just to do every hour the duty of that hour—the aims would take care of themselves. This is good advice, and the graduate who does this will accomplish more in the world, both for himself and for the community in which he resides, than will the young man who aims so high and so long that he never has time to attend to sordid details. In the drug business, as elsewhere, it is the details that count.

### TO COLOR TABLETS OF MERCURIC CHLORIDE.

**W**HILE much has been written about coloring solutions of mercuric chloride, so as to lessen the danger of poisoning therefrom by inadvertence, the idea of introducing the coloring agent into the tablet from which mercuric chloride solutions are most frequently made has not been generally adopted, for although most manufacturers do prepare colored tablets they are not sent out unless especially called for.

One cause for this is doubtless to be found in the difficulty in finding a coloring agent which while soluble is not affected by contact with mercuric chloride in the solid form. Such a coloring matter has been found in eosine, by JACOB S. BAER of Philadelphia, who recently directed our attention to its applicability for this purpose. The addition of 1-40 grain of eosine to each tablet, intended to produce a pint of 1 to 1000 solution of mercuric chloride, imparts a decided reddish pink color to the tablet itself, and produces a solution of a strikingly characteristic pink fluorescence, but which does not stain either the hands or the linen.

Surgeons have found that the addition of eosine not only furnishes a clue to the identity of the solution but also, by the depth of color, to the strength as well, and both these points are of much practical importance, particularly in ophthal-

mic practice where several solutions containing different ingredients are frequently at hand.

It is true that fuschin has been recommended for coloring solutions of mercuric chloride, but experience seems to indicate that the preference should be given to eosine.

The strikingly characteristic fluorescence of solutions containing eosine would soon come to be recognized by the public as being indicative of the presence of poison, if its use in corrosive sublimate tablets, solutions, etc., became general or were made obligatory, and it would be a step in the direction of the conservation of the public safety if all State poison laws could be amended so as to render obligatory the addition of eosine to all corrosive sublimate before its sale to the public.

### A TWO HUNDRED DOLLAR PRIZE COMPETITION.

**A** LEADING feature of the magnificent special number of this journal which will be issued on August 25, 1896, will be the publication of the results of a series of special prize competitions, details of which occupy a double page announcement on pages 28 and 29 of this issue, and in which competitions we cordially invite a full and free participation on the part of our readers. This number will also contain a graphic, illustrated account of the meeting of the American Pharmaceutical Association at Montreal. To call the attention of our readers prominently to the matter we reprint below the terms of this series of competitions.

#### THE ADVERTISING COMPETITION.

With a view to ascertaining more definitely the extent of the improvement in advertising among the retail drug trade, we again offer one hundred dollars in prizes for ideas and papers on advertising, the sum to be apportioned as follows:

**Forty dollars** for the best paper giving a general plan of advertising for a retail druggist, with details as to the amount to spend in proportion to the profits of the business, and practical suggestions as to the relative value of different methods of advertising and how they should be utilized.

**Thirty dollars** for the best plan for the arrangement of a drug store and show windows, accompanied by photographs or rough sketches and descriptions. The sketches will be received, no matter how rough, providing they convey definite ideas of the subject.

**Fifteen dollars** for the best set of three 8-inch newspaper advertisements of a retail drug store, either printed or with general directions as to type and display.

**Fifteen dollars** for a photograph or sketch (however rough), with detailed description, of the best window display for a retail drug store.

#### THE FORMULAS COMPETITION.

The technical side of pharmacy will also be looked after in this special August number of the **AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD**, since in it will be announced the results of a fifty-five dollar prize competition for the best practical formulas submitted as follows:

**Twenty-five dollars** for the best five formulas for pharmaceutical preparations, such as elixirs, syrups, etc.

**Fifteen dollars** for the best five formulas for specialties intended for sale over the counter.

**Ten dollars** for the best three formulas for soda fountain syrups.

**Five dollars** for the best original syrup formula. This last is a special prize offered by a subscriber to the **AMERICAN DRUGGIST**, the formula to be published in the columns of this journal.

#### THE SIDE LINES COMPETITION.

A preliminary announcement of this competition appeared in the issue of the **DRUGGIST** for April 10, and it is further elaborated in our advertising pages. Intending competitors are requested to submit papers suggesting some particular side line which can with profit be taken up by the pharmacist, and giving full details as to the cost of goods, margin of profit, adaptation to locality and methods of introducing, etc. For the best three papers submitted there will be awarded fifty dollars, to be divided into sums of twenty-five dollars, fifteen dollars and ten dollars respectively.

#### The Largest Regular Issue.

In its issue of April 22, *Printers' Ink*, the authority on circulation ratings, has the following to say of the **AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD**:

Among the nearly a dozen papers in New York devoted to drugs and chemicals, none has credit for so large a regular issue as is accorded to the **AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD**, published semi-monthly at New York City, and the publishers of the American Newspaper Directory will guarantee the accuracy of the circulation rating accorded to this paper by a reward of \$100, payable to the first person who successfully assails it.

#### The Best for Students.

I find your journal is the best and most instructive for a young man at college to take.

ALBERT W. FOX.  
VANDERBILT UNIVERSITY,  
NASHVILLE, TENN., May 2, 1896.

# First Lessons in Pharmacy.

## BOOKS RECOMMENDED FOR BEGINNERS.

### PROFESSORS OF PHARMACY NAME THEIR CHOICE OF BOOKS.

#### A GOOD ENGLISH EDUCATION A NECESSARY FOUNDATION FOR THE TYRO IN PHARMACY.

*The special series of articles on the best five books for the beginner in pharmacy commenced in our issue of April 25, embodies the carefully expressed views of the leading professors of pharmacy in the United States, and as such will prove of great practical value to both students and teachers.*

*Analysis of the series shows the following books to be the choice of the majority of teachers throughout the country as*

#### The Best Five Books for the Beginner in Pharmacy:

U. S. Pharmacopœia.  
Remington's Pharmacy.  
U. S. Dispensatory.  
Sayre's Materia Medica.  
Gray's Botany.

*The contributors to this interesting series of articles represent all of the prominent colleges and schools of pharmacy in the United States; and the names will be recognized as those of men who have prominently identified themselves with the progress of pharmacy in all of its various departments. The full list includes:*

JOSEPH P. REMINGTON,  
WILBUR L. SCOVILLE,  
C. S. N. HALLBERG,  
OSCAR OLDBERG,  
A. B. STEVENS,  
JAMES M. GOOD,  
GEO. B. KAUFFMAN,  
H. D. DIETRICH,  
OSCAR C. DILLY,

CHAS. CASPARI, JR.,  
FREDERICK J. WULLING,  
C. T. P. FENNEL,  
J. T. MCGILL,  
WYMOND A. BRADBURY,  
F. P. DUNNINGTON,  
F. J. SHADD,  
DAVID WALKER,  
CHAS. M. FORD.

VIRGIL COBLENTZ,  
GEO. F. PAYNE,  
W. M. SEARBY,  
E. A. RUDDIMAN,  
JULIUS A. KOCH,  
GEORGE WAGNER,  
B. S. YOUNG.

#### PROF. E. A. RUDDIMAN,

Vanderbilt University.

It is no easy task to select five books for a beginning student in pharmacy without knowing something of the student's attainments. I do not know that we get any more poorly prepared class of students than most colleges, but we frequently have to advise them to go home and study a good standard book on the following subjects: English Grammar, Arithmetic, Geography, Botany and History. A thorough knowledge of these should be insisted upon, and I trust that in advising young men you will emphasize this point. Those are the best five books that the average pharmacy student could study.

And again, the selection of books relating more directly to pharmacy would be influenced by whether the student intends going to college or not. If he does intend going, then he should not waste his time trying to study chemistry. If he cannot go to college then some chemistry is necessary, and the five books which I would advise him to study would be as follows:

1. The Pharmacopœia, and in connection with it. 2. Treatise on Pharmacy, by Caspari. 3. Organic Materia Medica and Pharmacognosy, by Sayre, to be studied in connection with the drugs found in the store. 4. Any good standard chemistry such as Remsen. 5. Gray's Botany. In case botany has not yet been studied. If it has, I

would substitute a work on therapeutics, such as White's Materia Medica and Therapeutics.

Above all, advise them to get a good sound education in the common branches of study.

E. A. RUDDIMAN.

NASHVILLE, TENN.

#### PROF. C. T. P. FENNEL,

Cincinnati College of Pharmacy.

Your query on the face of it appears easy of answer and yet a little thought upon the subject will convince most of us of the difficulty of deciding which five books are best for the beginner in the study of pharmacy. My experience in the last few years has been such that I have lost all enthusiasm and confidence in the success of the efforts seeking higher pharmaceutical education. The foundation upon which our structure of pharmaceutical education is built is absolutely faulty and consequently the final result is one of complete collapse. Our American literature upon pharmacy is thorough and complete, and of such scientific value as to merit recognition by the best talent of Europe. Can anyone cite better works than those of Remington, Maisch, Trimble, Sedtler and others, the work of American thought and practices? I think not, and yet these works are beyond the grasp of those who are beginners in study of this day. The majority of the material entering upon the study of pharmacy is not prepared by preliminary education to digest the best

works of American pharmacy. The lack of preliminary general education is the rock upon which American pharmacy is shattered. We must seek a good foundation and a soil fit to propagate the seeds sown by the best American authors.

CHAS. T. P. FENNEL.

CINCINNATI, OHIO.

#### PROF. DAVID WALKER,

Kansas City College of Pharmacy.

Inasmuch as the books are desired to meet the requirements for home reading by beginners they must necessarily be written in a style that is simple, clear and interesting.

It would be difficult to find better examples of this style than the Fourteen Weeks Series, by J. D. Steele, and if the student has never studied any of the pharmaceutical sciences, it will not be a waste of time to begin with Steele's Physics and follow it with his Chemistry. These will prepare him for the more complete scientific works. The following five books would be my suggestion:

1. Bartley's Medical and Pharmaceutical Chemistry.
2. Wood's Botany.
3. Maisch's Organic Materia Medica.
4. Coblenz's Handbook of Pharmacy.
5. The United States Pharmacopœia.

DAVID WALKER.

KANSAS CITY, MO.

#### PROF. J. T. MCGILL,

Vanderbilt University.

What the best books for the student are depends really upon his aims and his educational advancement. If the student expects to attend a school of pharmacy, and has not at least a high school education, the best books for him are a standard arithmetic, grammar, U. S. history and geography. I think, generally, it is better for the student to defer the study of chemistry until he reaches it in his high school or college course. If he never expects to attend a school of pharmacy or other school where he can study chemistry in connection with laboratory work, of course he should study chemistry and make the most he can of it. Storer and Lindsay or Remsen's Elementary Chemistry, or Shepard's Chemistry, will be suitable. But I do not usually advise the student who is expecting to go to a school of pharmacy to devote himself to chemistry; but to see to it that he is well up in the branches of a high school education in the first place; and secondly, if some time is to elapse before he shall go to college, to secure work in a drug store and learn what he can of practical pharmacy.

J. T. MCGILL.

NASHVILLE, TENN.

#### PROF. W. M. SEARBY,

California College of Pharmacy.

I cannot answer yours of the 8d inst. satisfactorily to myself, or advantageously to the pharmaceutical tyro, because "circumstances alter cases." My experience tells me that the majority of young men in drug stores would be more competent pharmacists by the time they are 30 years of age if they spent two or three years more at school, before they devoted any study to the branches that pertain to pharmacy. A good English education, with a fair acquaintance with algebra, geometry, Latin, and such things as a man fairly educated would have mastered before he left school, is a necessary foundation for a broadly cultured pharmacist. With such a ground work,

the student always makes good progress when he takes up strictly pharmaceutical subjects. If he has had but a meager education before entering the drug store, let him devote himself to studies that will broaden his mind and develop his mental powers. Having done this, he need not fear failure in his college course.

And as for the best five books. That is too many. One good book mastered, digested, is worth more than six books merely read. I would give him:

1. Webster's or Worcester's Dictionary—or if he can afford it, the Standard, or better still the Century—let him never pass a word he does not know the meaning of.

2. A good Latin dictionary.

3. An elementary treatise on botany—Gray's or Bastin's.

4. Attfield's Chemistry.

5. The U. S. Pharmacopoeia.

I name an elementary work on botany because a fair acquaintance with plants can be gained by the student without the aid of a preceptor. Where, however, the student can't "catch on" to this, let him drop it out, and stick to his four books.

W. M. SEARBY.

SAN FRANCISCO, CAL.

### PROF. G. F. PAYNE,

Atlanta College of Pharmacy.

We scarcely know how to answer your question as to our opinion on the above subject. We certainly do not think that any one set of five books is best adapted for every one, and besides where there are so many excellent works we feel a little chary in saying which we consider the best. Certainly the works of Coblentz, Caspari, Oldberg and Remington on pharmacy are of wonderful excellence, each excelling the other in some particular. Professor Remington's work has been long acknowledged as standard, its voluminous character being its chief objection for the student. On this account the other three works have the advantage for a beginner, as soonest giving him a comprehensive insight into the leading points in pharmacy. We do not think that works for beginners should be loaded with recipes, as we consider the time devoted to memorizing such formulae can better be devoted to other subjects, as no cautious and safe proprietor would permit formulae to be compounded in his establishment from memory.

In materia medica we consider Maisch's excellent work the best for the students. In chemistry, Sadtler and Trimble's work, Simon's and Attfield's are all three of great excellence. We also consider Long's Table for Physicians and Druggists a valuable work. Bastin's College Botany, with either Gray or Wood, probably completes the list of the branches you wish to be covered. One of the above works on pharmacy, one of the above works on chemistry, Maisch's Materia Medica, Long's Tables and one of the above botanies will give you our five books for the student as definitely as we would care to express ourselves.

GEO. F. PAYNE.

ATLANTA, GA.

### PROF. A. B. STEVENS,

University of Michigan School of Pharmacy.

The following list of books is submitted:

Freer's Chemistry.

Materia Medica, Sayre.

Physics, Carhart and Chute's.

Botany—Spalding's Introduction to Pharmacy. Caspari's, Coblentz, or Remington's.

A. B. STEVENS.

ANN ARBOR, MICH.

### PROF. J. A. KOCH,

Pittsburgh College of Pharmacy.

While there is yet much to be desired in pharmacy text books, the following would, in my opinion, be about the best selection that could be made:

Coblentz's Handbook of Pharmacy.

Elementary Chemistry, by Trimble and Sadtler.

United States Pharmacopoeia.

Bastin's College Botany.

Maisch's Materia Medica.

Of course it is necessary to modify such a list to meet the requirements of different students.

J. A. KOCH.

PITTSBURGH, PA.

### PROF. W. H. BRADBURY,

National College of Pharmacy.

I would suggest the following as suitable for study unaccompanied by experimental work: though, if the latter be desired, they afford opportunity for practical work also:

Remington's Pharmacy.

Simon's Chemistry.

Gray's Lessons and Manual of Botany.

Gage's Physics.

Maisch's Organic Materia Medica.

WYMOND H. BRADBURY.

WASHINGTON, D. C.

### PROF. OSCAR C. DILLY,

Louisville College of Pharmacy.

The United States Dispensatory I would place at the top of the list, closely followed by Remington's Pharmacy. Notwithstanding the many new works in chemistry to be had, and good works too, I still prefer Fownes'.

A new work on Materia Medica and Pharmacognosy—one that I admire very much—is Sayre's. The arrangement of its contents is such as to make it especially suitable in the hands of a student. I would complete the list of five books with Gray's Structural Botany.

OSCAR C. DILLY.

LOUISVILLE, KY.

### PROF. G. WAGNER,

The University of Kansas School of Pharmacy.

The five books I would choose to place in the hands of a novice in pharmacy are:

Remsen, Introduction to Chemistry.

Remsen, Introduction to Organic Chemistry.

Gage, Physics.

Gray, Lessons in Botany.

Coblentz, Pharmacy.

That is my choice believing as I thoroughly do that a student needs the principles of science before he studies applications, I have included only one work of a strictly pharmaceutical nature, and even that could, perhaps very profitably, be replaced by some standard work on plant histology, or on microscopical technique.

I should also like to say that the ordinary American boy who would make use of such a list as the above is very much in need of a caution as to the use he makes of the books. Merely reading them through, even when done studiously, amounts to nothing. He must go very slow, and especially must he try to

perform, even if crudely, every experiment described or hinted at, otherwise all memorizing of jaw breaking technical terms is not only worthless, but positively harmful.

GEORGE WAGNER.

LAWRENCE, KAN.

### PROF. GEO. B. KAUFFMAN,

Ohio State University School of Pharmacy.

If limited to five books, I believe these should be a dispensatory, an elementary chemistry, an elementary botany, a treatise on pharmacy and a treatise on materia medica. I would not presume to name five books of this class best for the purpose. In the matter of elementary chemistry and books of materia medica, the range of choice is so large and many are so excellent that it would be presumptuous for me to name the best.

The range of dispensatories and text books of pharmacy is not so wide, but even there it seems to me it would be out of place to be more specific.

GEO. B. KAUFFMAN.

COLUMBUS, OHIO.

### PROF. CHAS. M. FORD,

Denver College of Pharmacy.

I would recommend:

U. S. Pharmacopoeia.

Remington's Pharmacy.

National Dispensatory.

Attfield's Pharmaceutical Chemistry.

Bastin's College Botany.

"Gage's Microscopical Methods,"

"Bloxam's Organic and Inorganic Chemistry," "Lyon's Pharmaceutical Assaying," should be added in short time.

We need very much a companion work to the U. S. P. for advanced students in pharmacy.

C. M. FORD.

DENVER, COL.

### PROF. F. P. DUNNINGTON,

University of Virginia Department of Pharmacy.

Attfield's Chemistry.

Beilstein's Chemistry (Curtman's translation).

Remington's Pharmacy.

Newth's Inorganic Chemistry.

F. P. Venable, History of Chemistry.

F. P. DUNNINGTON.

UNIVERSITY OF VA.

### PROF. BRIG. S. YOUNG,

Pharmacy Department Ohio Normal University.

I would recommend the following to a student for home study:

Remington's Pharmacy.

Attfield's Chemistry.

U. S. Pharmacopoeia.

U. S. Dispensatory.

Schimpf's Volumetric Analysis.

B. S. YOUNG.

ADA, OHIO.

### PROF. H. D. DIETRICH,

Oregon College of Pharmacy.

The following five books are, in my estimation, the most desirable:

U. S. Dispensatory.

Remington's Pharmacy.

U. S. Pharmacopoeia.

Maisch's or Sayre's Materia Medica.

Curtman's Chemical Lecture Notes.

H. D. DIETRICH,

Editor *The Pharmacal Digest*.

PORTLAND, ORE.

**PROF. F. J. SHADD,**

Howard University (Colored), Department of Pharmacy.

☞ We recommend the following books for our students in pharmacy, viz.:  
Remington's Pharmacy.

U. S. Dispensatory.  
U. S. Pharmacopoeia.  
Robinson's Latin Grammar of Pharmacy.

National Dispensatory.

WASHINGTON, D. C.

F. J. SHADD.

## The Military Pharmacist in the United States Army.

**T**HE final installment of the series of articles descriptive of the status of the military and naval pharmacists of the leading European countries appeared in our last issue. We supplement this series by communications from pharmacists in the service of the United States, received in response to the following:

"Will you kindly favor us with a letter giving a brief outline of the manner in which you came to enter the service, the experience and educational qualifications which you had prior to entering it, and some general idea of the duties of your position, and its various aspects both agreeable and otherwise?"

### After Twenty-nine Years' Service.

A. VON CLOSSMAN, M.D.

Hospital Steward, U. S. A., Jefferson Barracks, Mo.

The bills now before Congress, having for their object the bringing of the status and pay of the pharmacists of the United States service to a standard commensurate with the dignity and importance of the profession, should have the active support of all concerned, and the thanks are due to the American Pharmaceutical Association for the active part taken in this movement and to the professional journals taking cognizance of the same.

I believe that I may be taken as a fair specimen of what hospital stewards in the army are.

#### SERVICE IN THE AUSTRIAN ARMY.

I am a native of Hungary, and after having been educated at the Austrian Military Academy, entered the Austrian army, and while serving as an officer therein, commenced the study of medicine by taking two courses of medical lectures at the Army Medical School at Vienna.

#### SERVICE WITH EMPEROR MAXIMILIAN IN MEXICO.

After serving six years in the armies of Austria and with Maximilian in Mexico I came to the United States and was easily persuaded to enter the American army, enlisting February 19, 1867. I was at once assigned to the Thirty-seventh United States Infantry, made a non-commissioned officer and participated in General Hancock's campaign against the Indians of the Plains during the winter and spring of 1867. I marched with the regiment to New Mexico, where in October, 1869, after passing the necessary examination, I was made a hospital steward, United States Army, from first sergeant Company "A," Thirty-seventh Infantry. From that date on I served at almost every post in New Mexico and Arizona, passing a great part of my time in the saddle, accompanying scouting parties or railroad surveys, and nearly always performing the duties of a physician.

#### GRADUATES IN MEDICINE.

After serving nearly nine years in the South I was ordered for duty in New

York Harbor and to Columbus Barracks, Ohio, and while on duty there I improved my time by finishing up my medical education and graduating in medicine at Starling Medical College, Columbus, Ohio. From Columbus I was sent to Dakota, and after serving at several posts and in the field in that severe and trying climate for nearly 15 years, was sent to Jefferson Barracks, Mo., where I am now serving. This gives me a record of 29 years' continuous service, with only 22 days' absence from duty, on furlough, without a single day's arrest or punishment.

#### THE SOCIAL STATUS OF THE PHARMACIST.

My long services and experience in this and other armies may have some little value in my expression of opinion on the status and pay of the hospital stewards in the United States army. The social status of the stewards is an abomination—he is neither fish nor fowl. While he is required to be a professional man with manners and attainments, is generally well thought of and respected by the officers of the military post, is in many instances the family physician and consultant of the families of soldiers and civilians living at the post, and in the absence of commissioned medical officers is frequently consulted and asked to prescribe for the families of officers, he has no social standing and carries the stigma of being "only an enlisted man." In the intercourse with civilians he is looked down upon because he has no social status in the army, his family at a post has virtually no associates, they are not recognized by the families of the officers, and by the families of other enlisted men are considered as "stuck up."

#### QUALIFICATIONS REQUIRED.

The steward at a military post has to be a competent, experienced compounder, has to be well versed in minor surgery, nursing, urinary analysis, first aid to wounded, and in emergencies he must keep well up in the profession and keep abreast with the rapid strides and discoveries of the profession. He must be handy at pulling teeth, and must have hygiene at his fingers' ends. Plumbing with all its intricate mysteries should be an open book for him. He must be a good and correct clerk and accountant, and as he has thousands of dollars' worth of Government property under his care,

he has to keep a close watch over it to avoid its misapplication, theft or unnecessary destruction. He is the immediate instructor of the men of the hospital corps serving under him in their duties, consisting of drill, nursing, bandaging, etc.

#### DUTIES OF THE HOSPITAL STEWARD.

The steward at the military post is a sort of "maid of all work"—is supposed to be always on hand, from the early morning at reveille till the next early morning at reveille. There are no office hours for him. If he does not do things himself he must see that others do them, and do them properly, and to that end must be ever present, alert, industrious, strictly sober and honest.

He has to be something of a cook and caterer, as he has the running of the hospital mess and the purchase of the supplies for the men under his care; he has to constantly think, scheme and manage to make the amount allowed by the Government (about 20 cents per diem for each man) provide good and wholesome food of sufficient variety; he has to be gentlemanly and courteous to the ladies and children who constantly invoke his assistance and help, or his usefulness at a military post will be greatly impaired and he will soon have to look for other fields of activity.

All the above are requisites of a hospital steward, United States Army, for the magnificent sum of \$45 per month, with the usual small increase for length of service.

#### HARD WORK, WORRY AND HARDSHIPS.

There may be pleasant sides to the life of a hospital steward, but outside of the little home circle I have failed to find them. I have served 29 years, but have never known anything else than hard work, worry and hardship, very little thanks, and with the exception of an occasional acknowledgment of work well performed by the surgeon in charge or an inspector, have never sought or received anything but strictly my Government allowances.

I do not intend to speak for myself alone, but there are quite a number of other stewards who have well earned better treatment at the hands of the Government. It is nothing but justice we are asking. Ours is a noble profession, progressive and working for the benefit of humanity, and we should be paid at least as well as veterinarians, sail-makers, etc., and our social status should be such that we could associate with our confreres in civil life on equal terms. The medical officers of the army have received all they ever asked for in regard to pay, rank, etc.; would it not be fair that the profession of pharmacy should get a modicum of the justice which has been accorded to them?

#### A New Cure for Hiccough.

A female patient presented herself at the Hotel Dieu of Lyons for a rebellious hiccough which had resisted all treatment for four days. She was asked to show the tongue, and it was noticed that with the putting out of the tongue the hiccough ceased. The same thing has since been tried, and with success, in other cases. All that is necessary, apparently, is to strongly push the tongue out of the mouth and hold it so for a minute or two. It is also suggested now to try the same thing in suffocative cough, as whooping cough and choking by irrespirable gases.

# A Synopsis of the Pharmacy Laws of the United States.\*

A Summary of the Principal Provisions of the Various Laws Pertaining to the Practice of Pharmacy.

By J. H. BEAL,  
Scio, Ohio.

THE object of the following papers is to present in a form convenient for reference, and free from legal verbiage, the principal features of the several pharmacy laws of the American Union, the provisions chiefly referred to being as follows: The dates of enactment and amendment of the laws and the extent to which they apply over the State. The constitution and selection of the examining boards, their revenues, powers, and compensation; the grades of licenses issued, the legal qualifications of licentiates, and the credit allowed for diplomas in medicine and pharmacy; and the fees for registration and renewal, provisions affecting adulterations, the labeling of poisons, etc.

*Unless otherwise expressly stated in the abstracts given it is to be understood:*

1. That each law applies territorially to the entire State which enacted it.
2. That the style of the examining board is simply Board of Pharmacy or State Board of Pharmacy.
3. That the number of years for which the members hold office is equal to the number of members on the board, i. e., if the board has five members the term of office is five years.
4. That the statutory titles of the licentiates are Registered Pharmacist and Registered Assistant, or Assistant Pharmacist.
5. That the certificates of other boards and diplomas of colleges of pharmacy and medicine are not recognized by the law.
6. That there is no statutory requirement of age and experience.
7. That no renewal of registration is required.
8. That the Pharmacy Act does not prohibit adulterations nor require the labeling of poisons.
9. In general that when the abstract does not mention any particular subject, it is because the pharmacy law is silent upon the point in question.
10. That certain provisions uniformly present in all the laws are omitted, such, for example, as the provision for the registration without examination of those engaged in pharmacy at the time of enactment of the law. Such provisions are of temporary and local interest only and would occupy space without imparting information.

In order to avoid needless repetition, the following general forms of poison and label laws are given, and are referred to by number under the States which have the same or similar provisions:

## General Form of Poison and Label Law.

### FORM NO. 1.—Schedule A.

Arsenic, and its preparations, corrosive sublimate, white precipitate, red precipitate, red mercuric iodide, potassium cyanide, hydrocyanic acid, strychnine, and all other poisonous alkaloids, and their salts, essential oil of bitter almonds, opium and its preparations, excepting paregoric and other preparations of opium containing less than 2 grains to the ounce.

### Schedule B.

Aconite, belladonna, colchicum, conium, nuxvomica, henbane, savin, ergot, cotton root, cantharides, creosote, digitalis, and their pharmaceutical preparations, croton oil, chloroform, chloral hydrate, zinc sulphate, mineral acids, carbolic acid and oxalic acid.

The articles contained in both schedules must be labeled, both on the container and on the outside wrapper, with the name of the article, the word "Poison," and the name and place of

business of the seller. Nor may any such article be delivered until it has been ascertained that the purchaser is aware of its poisonous character and desires it for a legitimate use. In addition to the preceding, when any article in Schedule A is sold an entry must be made in a book kept for the purpose, stating the date of the sale, the name and address of the purchaser, the name of the article, the purpose for which it is to be used, and the name of the dispenser. This record must be preserved for at least five years. The requirements as to labeling and recording do not apply to poisons dispensed on physicians' prescriptions, when not in unusual quantities or doses.

### FORM NO. 2.

The same as No. 1, except that all named poisons are embraced in one schedule and that the recording of the circumstances of the sale is not necessary.

Variations from the above forms are noted under the laws in which they occur.

It should also be remembered that the synopsis purports only to give the provisions of the "Pharmacy Act" itself. The criminal code of the State may contain other laws affecting the practice of pharmacy, or the State Board may have rules fixing fees less than allowed by the statute, or requiring age and experience when the law does not. In only a few laws are such facts referred to.

Some of the laws are so loosely drafted as to leave the meaning of certain provisions in doubt. In such cases the writer has adopted that interpretation which seemed to him most probable.

In some instances the date of enactment could not be obtained, and in the case of a few others the dates given are open to doubt. The writer will be thankful for the correction of any errors which he may have made. The writer desires also to express his obligations to the Secretaries of various boards, for courtesies shown, and to Caswell A. Mayo, Editor of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, for assistance in procuring copies of the laws and for revising the abstract of the laws of New York.

## Massachusetts.

Enacted 1885. Amended 1887, 1898.

The Board of Registration in Pharmacy consists of five members appointed by the Governor with the advice and consent of the council, and may be removed by the same power "for cause." Not more than one member may be chosen from the same city. They receive \$5 per day and expenses. The board is required to hold three meetings a year. Receipts are paid into the State treasury, and all disbursements are made from the same, but may not exceed the amount paid into the treasury.

There is but one grade of licentiate, who is styled pharmacist.

The fee for examination and registration is \$5.

The act does not apply to the sale of proprietary remedies, nor to the sale by grocers of the usual domestic remedies, not poisonous, nor to wholesalers.

The poison schedule (contained in a separate act) includes the following: Arsenious acid, and Fowler's and Donovan's solutions, chloral hydrate, chloroform, corrosive sublimate, potassium cyanide, Paris green, phosphorus, prussic acid, tartar emetic, Parsons' vermin exterminator, rough on rats, atropine, morphine and strychnine and their salts, oils of pennyroyal, savin and tansy, opium, laudanum and McMunn's elixir, ergot and cotton root and their fluid extracts, and the tinctures of aconite, belladonna, digitalis, nuxvomica and veratrum viride. Every such substance must bear a label of red paper, printed in black, with the word poison, the address of the seller and the name of an antidote, if there be any. In addition, a record must be kept of the quantity sold, and of the address of the buyer. Poisons sold at wholesale or on prescription are excepted from this provision.

By an act of 1898 the board is directed to investigate charges of illegal liquor selling, permitting the use of certificates by unregistered persons, procuring liquor license in the name of a deceased registered pharmacist or other violation of the pharmacy laws, and after conviction therefor to revoke certificate of registration, which revocation shall be for one year for the first offense, or permanently if the case be flagrant.

## Michigan.

Enacted 1885. Amended 1887.

The Board of Pharmacy consists of five persons, selected and appointed by the Governor with the advice and consent of the senate. The secretary and treasurer receive a salary fixed by the board, and the other members \$3 per day and actual expenses. The receipts of the board in excess of its expenses are yearly to be covered into the State treasury, and are subject to the payment of expenses, if the receipts in any year are not sufficient for that purpose. The board is required to hold at least three meetings each year.

There are two grades of licentiates. Pharmacists must be 18 and assistants 16 years of age. Every licentiate must present evidence of temperate habits. Licentiates of other States may be registered without examination, at the option of the board, on payment of \$2.

\* We have published abstracts of a number of State laws in this series, as follows: Alabama, Arkansas, California, Colorado and Connecticut in the issue for March 25, p. 180; Delaware, District of Columbia, Florida, Georgia, Idaho and Illinois in the issue for April 10, p. 213; Iowa, Kansas, Kentucky, Louisiana, Maine and Maryland in the issue for April 25, page 246.



The fee for examination is \$3 for pharmacists and \$1 for assistants, with an annual fee of \$1 for the former and 50 cents for the latter. Licentiatees must notify the board of changes of location.

The act does not apply to the sale of proprietary articles or patent medicines "by persons who have been in such business for three years or more," nor to the sale of drugs, medicines, essential oils and tinctures which are put up and labeled by a registered pharmacist, and are labeled with the doses for persons from three months to 21 years of age, and if the article is a poison, with the names of the most common antidotes. Every substance usually denominated poisonous must be labeled with the word poison, the name of the article, and some simple antidote if any is known. Sales of arsenic, strychnine, corrosive sublimate and prussic acid must be recorded in the usual manner. Such acids as are used in coloring and tanning and 88 enumerated articles, among which are included Paris green, sugar of lead, laudanum, tincture of aconite, and other active agents, may be sold by unregistered persons. These, however, are required to be labeled as above.

Adulteration, sophistication, or substitution with fraudulent intent, is a misdemeanor. The Board of Pharmacy may procure the analysis of suspected articles, and prosecute offenders.

The senior pharmacist of every store is exempt from jury duty.

Penalties recovered for violations of the pharmacy act are paid to the State.

(To be continued.)

## On the Chemical Composition of the Oil of Sassafras Bark and Oil of Sassafras Leaves.\*

BY DR. FRED. B. POWER AND DR. CLEMENS KLEBER.

### 1. Oil of Sassafras Bark.

This oil has long been recognized by the United States Pharmacopoeia, and is very largely used in the United States, chiefly for flavoring purposes or for perfuming ordinary soaps. It is obtained, as is well known, by the distillation of the roots, with adhering bark, of the sassafras tree,† which is known botanically as *Sassafras officinale* Nees, or *Laurus Sassafras* Linné, or *Sassafras variifolium* (Salisbury) O. Kuntze (Nat. Ord. Laurineae).

The first chemical examination of this oil appears to have been made by Grimaux and Ruotte,‡ who stated it to consist of about 90 per cent. of safrol and 10 per cent. of a hydrocarbon, C<sub>11</sub>H<sub>16</sub>, which was termed safrene. They also observed the presence of an extremely small amount of a phenol, which was much more recently recognized by Pomeranz§ as eugenol, and estimated by him to be contained to the extent of 0.23 per cent. in the oil. Other investigations which have hitherto been made of this oil, such, for instance, as those of Saint

Evre\*, Faltin,† and Flückiger,‡, relate chiefly to the action of chemical agents upon the oil or to the characters of the safrol contained therein, but without affording any further knowledge of its constituents.

As we had an opportunity some time ago of distilling a considerable amount of this oil directly from the bark§, it seemed to us of interest to subject it to a more complete chemical study, the results of which are here presented. The yield of oil from the air-dry bark was 7.4 per cent. The oil has a yellowish or reddish yellow color, a specific gravity of 1.075 at 15 degrees C., and an optical rotation of + 3° 16' in a tube of 100 mm. The wood of sassafras roots, deprived of the bark, yields a comparatively small amount of oil, only 0.9 per cent., but this has the same specific gravity and the same properties as the oil distilled from the root bark.

### SEPARATION OF SAFROL.

In this investigation only the oil distilled by ourselves was employed. Three thousand grams of the oil were first placed in a freezing mixture of ice and salt, in order to separate the safrol contained therein. Under these conditions, and even after rubbing the sides of the vessel with a sharp-edged glass rod, no separation of crystals took place after several hours. It was this behavior of the oil which led Grimaux and Ruotte (*loc. cit.*) to consider safrol as an uncrystallizable body. The crystallization of the safrol takes place, however, immediately as soon as a trace of solid safrol, which has been otherwise obtained, is brought in contact with the oil. The crystalline mass was then allowed to drain well, and in order to separate any inclosed liquid it was repeatedly melted, crystallized and drained. By the subsequent fractionation of the remaining liquid portion of the oil that fraction which was collected at 280 degrees C. was likewise subjected to the treatment above described, and we thus obtained a total of 2,840 gm. safrol, or 78 per cent. With consideration of the small amount of safrol which undoubtedly still remained dissolved in the oil, the total amount of safrol in the oil may be regarded as about 80 per cent. The oil, deprived as completely as possible of safrol by exposure to cold, was then shaken with a 2 per cent. solution of sodium hydrate until nothing more was taken up by the latter, the alkaline solution freed from any suspended drops of oil by shaking it with ether, then acidulated, and again extracted with ether. By the careful evaporation of the latter, 15 gm., or 0.5 per cent., of a yellowish oil was obtained, the odor of which indicated it to consist of eugenol, and this, as previously stated, had already been recognized as a constituent of sassafras oil. For the more exact identification of this body, it was converted into the benzoate, according to the method of Schotten-Baumann, and was found to yield very readily a body which crystallized from alcohol in handsome, compact prisms, having a melting point of 69 degrees C., and thus, as was expected, consisted of pure eugenol benzoate.

### FRACTIONATION OF THE OIL.

The oil freed from eugenol was subjected to repeated distillation, when about one half of it passed over between 155 and 175 degrees C., and of this the greater portion distilled between 155 and 160 degrees C. From the latter a nitrosochloride was readily obtained, and from this in turn the benzylnitrolamine of pineus, melting at 138 degrees C. The small fraction distilling between 160 and 175 degrees C. contained an abundance of phellandrene, which was identified by the formation of its nitrite. A small portion distilling between 170 and 175 degrees C. was especially tested for the possible presence of cineol and dipentene, for these two bodies are known to be constituents of camphor oil,\* and, as our subsequent summary of the constituents of sassafras oil will show, the latter closely resembles camphor oil in its qualitative composition. The tests for these bodies were, however, attended with negative results, for by leading gaseous hydrobromic acid into the well cooled solution of the respective fraction in petroleum ether no crystalline compound was formed, nor could a solid bromide be obtained. The body to which the name of "safrene" has been given by earlier investigators, and to which we have already referred, thus appears to consist simply of a mixture of a large amount of pinene with some phellandrene.

### A HITHERTO OVERLOOKED CONSTITUENT.

The portion of the oil which distilled at first between 175 and 200 degrees C. became resolved by further fractionation into bodies of lower and higher boiling points. At a temperature above 200 degrees C. an abundance of crystals separated in the tube of the condenser, and the distillate itself formed a thick mass on cooling. When deprived of liquid by means of a filter pump, an abundant amount of white crystals was obtained, which, from their appearance and odor, were recognized as camphor. Their alcoholic solution was strongly dextro-rotary, they could readily be sublimed, and afforded with hydroxylamine a handsomely crystallizable oxime, having a melting point of 115 degrees C. This body was therefore positively identified as dextro-rotary camphor, a constituent of the oil which has been overlooked by previous investigators.

The portion of oil which distilled between 200 and 260 degrees C. could be separated almost completely by fractionation and crystallization into camphor and safrol. From the thick, resinous residue which remained at a temperature above 260 degrees C. we obtained subsequently a small fraction distilling between 260 and 270 degrees C. In this the presence of cadinene was presumed, as it gave in glacial acetic acid solution with a trace of sulphuric acid the violet coloration which is characteristic for this sesquiterpene. It was therefore diluted with ether, and saturated with gaseous hydrochloric acid, when, as is usual in the presence of cadinene, a deep violet coloration ensued, but on evaporation no solid hydrochloride was obtained. It is possible that this negative result was due to the presence of impurities, as on account of the very small amount of this fraction its thorough purification was impossible, and the presence of this sesquiterpene must therefore be left in doubt.

\* Schimmel & Co.'s Bericht, April, 1880.

\* From a circular issued by Fritzsche Bros., New York (Branch of Schimmel & Co., Leipzig), April, 1880.

† An interesting "Essay on Sassafras," by the late Wm. Procter, Jr., is contained in the Proc. Amer. Pharm. Assoc., 1893, p. 311. This relates chiefly to the history and distribution of the sassafras tree, the distillation of the oil, etc.

‡ Comptes rendus, 68, 1869, p. 928.

§ Chemiker-Zeitung, 14, 1890, Rep. p. 232.

\* Ann. Chim. Phys., [3] 12, 107, and Liebig's Annalen, 52, p. 396.

† Liebig's Annalen, 87, 1853, p. 376.

‡ London Pharm. Jour., XVII (1887), p. 999, and Jahrb. der Chemie, 1876, p. 910; 1887, p. 94.

§ Schimmel & Co.'s Semi-Annual Report, October, 1893, p. 39.

## CAMPHOR CONTENT.

In order, finally, to determine the amount of camphor present in the oil, it was converted, by reduction, into borneol, and the latter then estimated in the form of its acetic ester. For this purpose 20 gm. of the oil were dissolved in absolute alcohol, and 5 gm. of metallic sodium gradually brought into the liquid at the boiling temperature. After the complete solution of the sodium a considerable amount of water was added, and the separated oil was boiled for an hour with acetic anhydride and a little anhydrous sodium acetate. The resulting liquid was then washed with water, and subsequently with a solution of sodium carbonate until perfectly neutralized, then dried by means of calcium chloride and filtered. On saponification with an alcoholic normal solution of sodium hydrate, 7.4 ccm. of the latter were required for the saponification of 17.55 gm. of the acetylated oil, which would correspond to 6.8 per cent. of camphor in the original oil.

From the results of this investigation the constituents of the oil of sassafras bark, and the relative proportions in which they are contained therein, may be summarized as follows:

	Per cent.
Safrol..... $C_{10}H_{12}O_2$ , about 80	
Pinene..... $C_{10}H_{16}$	" 10
Phellandrene..... $C_{10}H_{18}$	
Camphor, dextrogyrate..... $C_{15}H_{24}O$	6.8
Eugenol..... $C_{11}H_{14}O_2$	0.5
A high boiling portion, consisting of: Cadinene, $C_{15}H_{24}$ (?), and residue.....	about 3.0
	100.3

In this summary the marked similarity in the qualitative composition of sassafras oil and camphor oil is apparent, the latter containing in addition small amounts of cineol and dipentene. This similarity in the composition of the two oils is, however, not surprising, in view of the fact that the sassafras and camphor trees belong to the same plant family, and in the classification of Linné were included in the same genus.

## II. Oil of Sassafras Leaves.

It is quite well known, and has already been recorded by the late Professor Flückiger,\* that the leaves of the sassafras tree, when crushed, develop a finely aromatic odor, not at all reminding of safrol. It was, indeed, chiefly upon the instigation of Professor Flückiger, during a visit to the laboratorie of Fritzsche Brothers, at Garfield, N. J., in the summer of 1894, that we were led to undertake the distillation and examination of this oil. The material for this purpose was collected in the immediate neighborhood of the factory at Garfield, and a preliminary notice of the oil was given in the *Semi-annual Report*, October, 1894, p. 71, of Schimmel & Co. As there stated, the yield of oil is exceedingly small, amounting to but 0.028 per cent. of the weight of the fresh leaves, of which we distilled over 8,000 pounds.

As we are not aware that this fragrant oil has ever been obtained heretofore, or at least in an amount sufficient for its chemical examination, it has been to us a subject of special interest.

The oil possesses a light yellow color, and an exceedingly agreeable, somewhat lemon-like odor. Its specific gravity is 0.872 at 15 degrees C., and its optical rotation + 6° 25' in a tube of 100 mm.

On shaking the oil with a solution of sodium bisulphite a considerable amount of a solid compound separated out, which, however, on gently heating, showed an inclination to liquefy. This behavior indicated the presence of citral. To confirm this the bisulphite compound was pressed, washed with ether, and decomposed, when an oil was obtained having an intense lemon like odor, and this, when treated with pyroracemic acid and  $\beta$ -naphthylamine, readily yielded the citryl- $\beta$ -naphto-cinchonic acid, melting at 196 degrees C. The lemon-yellow laminae of this compound, when observed under the microscope, showed characteristic forms.

The oil deprived of this aldehyde, and washed with a solution of sodium carbonate, could not be completely distilled without decomposition, either under ordinary pressure or in a vacuum. A constant elimination of water took place, the distillate had an acid reaction, and the more volatile portion of the distillate contained a considerable amount of dipentene, which was identified by means of its tetrabromide. This behavior pointed to the presence of a readily decomposable ester. The oil was therefore saponified with an alcoholic solution of potassium hydrate and the product distilled with steam. There remained a considerable amount of a thick residue, which, on cooling, solidified to a butter like mass. It dissolved in a warm mixture of alcohol and ether, and, on cooling, again solidified to a magma of thin laminae. These were again re-crystallized several times from a mixture of ether and alcohol, and finally showed a melting point of 58 degrees C. The entire appearance of this body, as also its resistance toward the ordinary reagents, even warm sulphuric and nitric acids, left no doubt as to its identity as a paraffin. It could naturally not be determined whether it represents a single substance, for it is well known that it is hardly possible to purify or separate the paraffins completely by simple recrystallization. The mother liquor from the paraffin contained, furthermore, a considerable amount of a thick, oily body, which only distilled at a very high temperature, with accompanying decomposition, and which apparently consisted of polymerized and resinified products of terpenes.

(To be continued.)

## A Ready Method for the Detection of Acetanilid as an Adulterant.\*

BY DONALD L. CAMERON,  
Brooklyn, N. Y.

To give a ready method for detecting acetanilid in phenacetine or antipyrine, I found a more difficult undertaking than I at first anticipated. There are several methods, and all of them are ready to the actively engaged analytical chemist; but for the everyday busy druggist or pharmacist a ready and at the same time simple method is not so easy to find, for the active druggist in these go-ahead times has not always the appliances at hand for analytical analysis. Consequently, in order to make this paper of any value whatever, the method must not only be a rapid one, but must be as simple as circumstances will admit.

Acetanilid, like phenacetine, is only slightly soluble in cold water, and more

so in hot, but it is freely soluble in chloroform, while phenacetine is not. Should one, therefore, desire a very delicate test, chloroform can be used on the suspected powder to dissolve out the acetanilid, the resulting solution carefully evaporated, and the methods suggested in this paper then be applied to the residue. This, however, makes the work more complicated; and, except for rare occasions, or for some particular purpose, it is wholly unnecessary.

A much used test for acetanilid is carried out as follows: Place in a test tube about 2 grains of the suspected powder; add 10 ccm. of water and 4 ccm. of strong sulphuric acid; heat until a yellow color is produced, and then with a pipette or drop glass let a few drops of this solution trickle down the side of a test tube half filled with chlorine water, when, if acetanilid be present, the bottom layer will be violet and the upper one green. In the isonitrit test the powder is heated with a solution of caustic potash (KHO) or soda (NaHO) and a few drops (8 or 4) of chloroform added, when the penetrating and disgusting odor of phenyl-isonitrite, also known as phenyl-carbamine, is at once developed.

Potassium nitrate mixed with nitric acid gives no color, a distinction of acetanilid from phenacetine which similarly treated gives a deep red. A cold solution of acetanilid gives no color with solution of ferric chloride, which distinguishes acetanilid from antipyrine. Acetanilid gives no color with sulphuric acid.

## TESTS FOR PHENACETINE.

The following tests will serve to determine whether a sample presented contains any phenacetine: A hot solution containing phenacetine gives a violet color with chlorine water, fading to red. When boiled with hydrochloric acid the addition of a solution of ferric chloride produces a red color. When mixed with 4 drops of carbolic acid, and 2 ccm. of strong sulphuric acid is added, and the liquid, then carefully heated to the boiling point, phenacetine gives a purplish brown color, and produces the odor of acetone.

When 1 grain of phenacetine is boiled with 20 minims of hydrochloric acid, and the liquid diluted with 10 volumes of water, cooled and filtered, it gives a deep red color, with solution of chromic acid. It does not precipitate with bromine water, nor does it give the isonitrit reaction which serves to distinguish it from acetanilid.

## TESTS FOR ANTIPYRINE.

When the presence of antipyrine is suspected, its solubility in water easily separates it from the more insoluble substances that it is likely to be associated with; therefore, in making a test for antipyrine, shake the suspected powder with water in a test tube, filter and apply the following tests:

Antipyrine is freely soluble both in water and chloroform. With sodium nitrite and diluted sulphuric acid, it gives a green color. An aqueous solution with an equal volume of nitric acid turns yellow, passing to crimson on warming. Solution of ferric chloride gives a deep red color, which is discharged by dilute acids, like an acetone. On placing potassium nitrate in a tube with a little water, adding an excess of sulphuric acid and some solution of antipyrine, a green color appears. Freshly made sweet spirit of nitre, with a few drops of

\* *Pharmakognosie des Pflanzenreiches*, 3d edit., p. 452.

\* Read at the May meeting of the New Jersey Pharmaceutical Association.

diluted sulphuric acid, gives the same result, on the addition of a solution of antipyrine.

#### THE ISONITRIL TEST TO BE PREFERRED.

A number of experiments have convinced me that the simplest and at the

same time most effectual test for acetanilid, when suspected as an adulterant, is the isonitril test as given above (caustic potash or soda and chloroform.) The odor is so pronounced that no matter how small or great the quantity, it will invariably manifest itself.



Nutrose is the name given to sodium caseinate. It is not to be confounded with nutrol, which has previously been described in these columns.

**Volatile Liquid for Ice Machines.**—In order to prevent the crystallization of carbon bisulphide, when used as a means of producing cold, the addition of 1 part of chloroform or 1 part of benzol chloride to 9 parts of carbon bisulphide has been recommended.

**Preparation of Pure Hydrogen Dioxide.**—A neutral or acid solution of hydrogen dioxide may be evaporated down, if quite pure, to a strength of 50 per cent. If this be then further evaporated down in vacuo at gradually elevated temperature a nearly pure hydrogen dioxide comes over at about 84 to 85 degrees C. The process has been patented in Germany.

**Celluloid Covering for Wounds.**—Dr. Salzmann read before the March session of the Berlin Medical Society a description of a kind of celluloid capsule designed for the covering of wounds, which he has found in many cases to be of very great advantage in replacing bandages for the prevention of the contamination of the wound from external sources. The new covering does not interfere with the movements to the same extent as do bandages.

**Tincture of Horse Chestnut for Hemorrhoids.**—Dr. Artult recommends the tincture of horse chestnut (*Rev. der Therap.*) as an unfailing cure for hemorrhoids, in doses of 10 drops daily. He used a concentrated tincture the strength of which he did not state. In most cases a marked improvement was observed after two such doses, and after a few days the painful symptoms had entirely disappeared. The author did not offer any explanation as to which of the constituents the therapeutic effect is due.

Eucasein is a permanent compound of ammonia with casein which is being exploited in the European press as a medicinal food. It is claimed for it that it is very nutritious and assimilable, and that it does not cause any disturbance of the bowels as do some other concentrated foods. Foods rich in albumen are also generally rich in nuclein. But nuclein is the base whence uric acid is derived,

and its use is contra-indicated, of course, in rheumatism and all allied disorders. Eucasein, however, is not open to this objection, as it contains no nuclein like bodies. It is best exhibited in soup, chocolate, etc. It cannot be well given in wine or beer.

**A Russian Mouse Bacillus.**—In the year 1894, in the Department of Aamara, Russia, a contagious disease developed among field mice. The bacillus of this disease has been isolated and studied by O. Fischer, who succeeded in producing cultures of the bacillus by means of which mice were inoculated with the disease, and when these mice were turned loose in the sections where the number of mice was so large as to prove a serious detriment to agriculture, the results were all that could possibly be desired in the rapid extermination of these pests. The disease produced is not typhus, the bacillus of which was isolated by Löffler, and which has already been used to a certain extent for the extermination of mice.

**A New Method for Determining the Melting Point.**—In the course of legal analyses, where it became necessary to examine carefully very small quantities of stearin and other candle material upon pieces of clothing, and where the quantity of material was so small that the use of capillary tubes was impossible, Van Ledden-Hulsebosch (*Pharm. Weekblad*) devised the following method: He laid small pieces of the cloth on which the fat was detected in a small aluminum capsule, and floated this upon water in a large beaker. He then heated this water bath very carefully, and suspended in it a thermometer so adjusted that only the upper portion of the water affected the thermometer. Slowly raising the temperature, he kept a close watch on the thermometer and upon the grease under examination, and was thus enabled to determine with considerable accuracy both its melting and congealing points.

**The Origin of Atmospheric Oxygen.**—According to the view of Phipson, the atmosphere originally consisted of nitrogen, produced by the volcanic (?) energy of carbon dioxide. The oxygen has been added to this mixture of nitrogen, carbon dioxide and water vapor through the activity of plant life only. Experiments of Phipson (*Compt. Rend.*) indicate that

the plants of this day are anaerobic—that is, they can exist without oxygen. Experiments with *Convolutus arvensis* in a moist atmosphere of nitrogen and carbon dioxide showed that at the end of three months the atmosphere had changed, presumably under the influence of the plant, until it was practically of the same composition as the general atmosphere of the earth. The lower plant life, such as the algae, are particularly active in producing oxygen, much more so than the higher plants.

**Electricity in Mineral Waters, and Its Therapeutic Influence.**—It has very generally been claimed that artificial mineral waters are far less efficacious than are the natural waters themselves, and it is known that many watering places produce effects upon patients submitted to the regimen there prescribed which cannot be explained upon the basis simply of the chemical composition of the water. Several learned authorities have ascribed this to the negative electricity with which the water is charged. Zinno (*Bolletino Chim. Farm*) attributes the unexplained therapeutic activity of these waters to electricity, but believes that the electricity is generated to a certain extent by chemical changes which occur in the constituents of the water. The electrical energy contained in the waters, as indicated in the galvanometer, disappears more rapidly where the water is contained in closed vessels than when left open. It sometimes disappears within a few hours, and sometimes not until within several days after the water has been taken from the earth.

**Sublimate in Disinfection.**—We give the following from the *Magdeburger Zeitung* for what it is worth: 'One of the most useful and largely used disinfectants is, as is well known, corrosive sublimate, and this substance is very active in dilute solutions. It is, of course, also very active in strong solutions, but is not much employed in this form, as it is so strong a poison, and deaths (either by accident or design) by means of this poison are by no means infrequent. A case has just happened which shows, however, that great caution is also necessary when making use of the weak form of the disinfectant. For some time several of the nurses in a hospital in the town have been suffering from mercury poisoning. When the matter was investigated it was found that the only mercury in the place was the sublimate used in very dilute solutions for disinfecting purposes, and hence the mercury, although in very small quantity, must have been present in the form of vapor in the atmosphere and caused the symptoms in question. This shows the care necessary in using such a disinfectant as mercuric chloride.'

Eucaine, like cocaine, is the methyl-ester of a benzoylated oxypiperidincarbonic acid. From a chemical point of view eucaine has an advantage over cocaine in that it is not decomposed by boiling with water; cocaine under similar circumstances dividing into benzoylecgonine and methyl alcohol, and losing its efficacy as a local anæsthetic. Eucaine is used in the form of an injection, a solution of 1 to 6½ giving results that were entirely satisfactory. As regards the advantages of eucaine over cocaine, Kiesel of Berlin says that the heart is in no way influenced by it. The anæsthesia is more extensive in area and lasts longer than does that of cocaine. It is less dangerous. As much as 2 gm. (80

grains) of eucaïne can be injected without trouble; while of cocaine the similarly safe dose is only 0.01 gm. (1-6 grain). Solutions of 1 to 6½ in sterilized water are permanent at the ordinary temperature of the room. They remain clear without the addition of carbolic or salicylic acids and do not become flocculent as cocaine does, and, finally, it is intended to put eucaïne on the market at a price considerably less than that of cocaine.

**The Cause of the Coloration of Syrup of Hydriodic Acid.**—In a paper presented by Donald L. Cameron, at the recent meeting of the New Jersey Pharmaceutical Association, the author gave in detail the results of a series of experiments made by him a year or so since with a view to determining the cause of the coloration of this syrup. He had not published the rest of his work at that time, as just after concluding his experiment he learned that O. A. Rouillion had also been working on the same subject at the same time, and that both Mr. Rouillion and himself had arrived independently at practically the same conclusion,\* namely, that the color developed is nearly always due to the oxidation of the syrup, which results in the formation of caramel, and this color can be removed without detriment to the therapeutic qualities of the syrup by adding about ½ ounce of animal charcoal to the pint of syrup, agitating, allowing to settle for 15 minutes, and then filtering. If any free iodine should be present this treatment will not remove the color, and in this case of course the syrup should not be dispensed but should be thrown away, as it is valueless.

**Cloudiness in Antitoxin Serum.**—Tserghowski states (*Vratch*) that precipitation or cloudiness in serums does not necessarily depend upon the presence of bacteria, but may be due to the method of preparing the serum. One of the causes is the occasional lack of care in not separating completely the fibrin from the blood, which is occasionally not completely separated at the end of three days. This slowness in separating may be due to excessive bleeding or to hunger on the part of the animal immediately before it is bled, which causes a reduction in the number of the white blood corpuscles. It may also be due to an affection of the kidneys, brought about through the treatment in immunizing the horses. Another class of causes for the cloudiness is the change in the quantity of free alkali present, or change in the solubility of the albuminous and fatty bodies present in the serum through the addition of certain antiseptics. The addition of carbolic acid as an antiseptic is apt to produce cloudiness, since the acid can be used only in the form of a solution, and the water used in making this solution produces at first an opalescence and later a decided cloudiness, while the carbolic acid itself forms insoluble combinations with the albuminous constituents. Professor Dinkler has taken exactly the opposite view as regards carbolic acid, as he thinks (*Pharm. Zeit*) that it is to be preferred to camphor, which is used by some manufacturers, though the results depend largely upon the manner in which the carbolic acid is introduced.

**Resorcin as a Test for Chlorates.**—Denigés reports (*Repert. de Pharm*) that the presence of chlorates may be detected

by means of the same reagent as that used for the detection of nitric acid in the cold and tartaric acid when heated. He directs the following method of procedure: Put 1 or 2 drops of the solution to be examined into a test tube with 2 ccm. of pure sulphuric acid; cool by applying water to the tube, and shake. After cooling add without shaking 5 drops of resorcin sulphonic acid solution. Again cool the liquid and shake, when if chlorates be present in not more than 2 per cent. strength, a green coloration will be produced, which is clearly perceptible in the presence of as little as 1 100 mg. Under the same conditions nitric acid produces a pale yellowish color, turning to reddish violet upon heating. Since nitrous acid produces a violet blue coloration, and thus obscures the reaction, it is necessary to remove any nitrites before trying the test. For this purpose Denigés recommends the addition of half the volume of the solution of ammonia filtration and the addition of an excess of acetic acid. Take a few cubic centimeters of this solution, evaporate down, and then carry out the test as given above. The reaction is a specific one for chlorates, and does not apply to bromates as does that with aniline sulphate. It should be remarked that the solution freed as above from nitrous acid can still be used for the detection of nitric acid, it being sufficient to add 2 drops of this solution to 2 ccm. of pure sulphuric acid, and then add 4 to 5 drops of a saturated solution of ferrous sulphate. If nitrates be present, the well-known color reaction occurs, the shade varying from a rose red to brown, according to the quantity of nitric acid present.

### Aseptic Catgut.\*

BY CHARLES RICE, PH.D.

There is much diversity of opinion among surgeons regarding the most efficient way of rendering catgut ligatures absolutely sterile. Some still prefer the old-fashioned carbolyzed gut, prepared by macerating or digesting the raw gut with a 5 to 10 per cent. solution of carbolic acid, or chromicized gut, made by macerating the raw gut during 48 hours in a solution of 50 gm. of carbolic acid and 0.25 gm. of chromic acid in 1 liter of water, then removing and drying the gut and transferring it to carbolyzed oil (1 in 5). Others, and probably the majority of surgeons, prefer catgut which has been sterilized by certain liquids with the aid of heat. The liquid most generally used for this purpose is alcohol. In using alcohol for sterilizing catgut, it has been found that the more water the alcohol contains the lower must be the temperature of digestion; otherwise the gut will soften or become rotten. If absolute alcohol be used, the gut may be inclosed with it in hermetically sealed vessels, preferably glass tubes closed in the flame, and subjected to a heat, under pressure, up to 230 degrees F. and more, without the least injury to its strength. If it were subjected to such treatment while in contact with hydrous alcohol it would become weak and altogether worthless. Yet the ordinary 94 per cent. alcohol may be used if the temperature is not carried beyond the boiling point of the liquid at the ordinary atmospheric pressure—that is, if the alcohol is boiled in an open vessel. And in this case it has been

found that the boiling should not be continued materially beyond one hour. At one time sublimated gut was recommended and in use. This was prepared by adding a certain proportion, usually 1 in 1000, of corrosive sublimate to the liquid (alcohol) in which the gut has been boiled, but it was soon found that this rendered the gut more or less rotten, and therefore highly dangerous, as it was apt to break at any time, thus causing serious or fatal hemorrhage. It is not the writer's purpose to give an account of the various other methods heretofore proposed for preparing sterilized catgut. His present object is to describe those which have stood the test of time, and are now in use in the principal public hospitals of New York City.

### THE SELECTION OF THE RAW CATGUT.

Before speaking of the methods of sterilizing, something should be said of the raw catgut. Experience has shown that only the very best, smooth (not rough) musical strings should be used. Under ordinary circumstances five sizes are sufficient. These are violin D, A and E, and first and second banjo strings. These come in boxes containing 30 strings, each of the thinner strings measuring about 67 inches in length, being separately tied with fine twine. When the latter is cut, which need not be done until after the catgut has been sterilized, care must be taken not to scratch or nick the gut, as it would become weak at that spot. Although these musical strings undergo, in the course of their manufacture from the intestines of various animals (preferably lambs and kids) a series of purifying processes, such as the removal of the adhering mucous membranes, repeated maceration in weak alkali solution and frequent washing, yet they always retain more or less septic matter, which, if not removed or rendered inert, would be sure to cause trouble to the surgeon and his patient. Every string, moreover, before it is finally rolled up and tied, is rubbed with a cloth impregnated with some fatty oil, which penetrates the substance of the gut, and renders the latter more or less impervious to the ordinary solvents. A gut, therefore, which is afterward treated merely with an aqueous solution of carbolic acid, or with cold alcohol, with or without some antiseptic salt, is by no means to be trusted. It is essential that all fatty matter be extracted from the gut, or at least that the latter be thoroughly penetrated by an actual solvent of the fatty matter, which solvent will, at the same time, render permanently sterile any septic matter or germs that may be contained in the gut.

### THE DIFFERENT METHODS OF STERILIZING

The methods which are now almost exclusively employed in the public hospitals for sterilizing catgut are the following:

1. Maceration in oil of juniper and subsequent boiling with alcohol of 94 per cent.; then transferring to and keeping in chloroform saturated with biniodide of mercury.
2. Treatment as under No. 1, but with omission of the maceration in oil of juniper.
3. Simple maceration for at least 48 hours in chloroform saturated with biniodide of mercury. The strings are left in this solution and taken out as wanted.

### THE MOST EFFECTIVE STERILIZING AGENT.

Some five years ago, when the writer's attention was specially called to the necessity of devising some method by which catgut and other surgical ligatures could be rendered really sterile and trustworth-

\* See AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, October 25, 1896.

\* From the *Alumni Journal* of the New York College of Pharmacy for May.



thy, he made a number of experiments, the object of which was to ascertain in the first place what processes and solvents had the least weakening effect upon the tenacity of the gut, and secondly which of them would effectually sterilize the gut. It was thus found that chloroform, itself a most powerful antiseptic and germicide, was the most satisfactory solvent of the fatty matters in the gut. And it was further found that complete sterility was effected by saturating the chloroform with biniodide of mercury.

Numerous samples of the catgut thus prepared were examined bacteriologically, but in no case was the presence of any living germs revealed. At one time, some years ago, suppuration was observed to set in after the use of a catgut all derived from one particular lot just imported, and it was at first supposed that this had been imperfectly sterilized. Yet on examining samples of it under circumstances which would surely have revealed the presence of septic matter, the results were negative. Nevertheless it is now deemed advisable to use the additional precaution to subject the catgut to a preliminary sterilization by boiling it with enough alcohol of 94 per cent. to keep it covered. This is done in a large wide mouthed Erlenmeyer flask, to the neck of which is fitted an upright Allihn's glass condenser (the condensing tube of which has a number of bulb-like expansions), whereby loss of alcohol is avoided. The flask is set upon a steam bath, and the boiling kept up for one hour. The strings are then taken out and immediately transferred to the biniodized chloroform, in which they are left until wanted. When they are taken out for use, they are placed for a minute or so between folds of sterilized gauze, to allow the chloroform to evaporate. They will now be found to be beautifully clean and more or less bleached, and to have lost none of their strength. Some surgeons prefer the method mentioned above, under No. 1, which involves a previous maceration in oil of juniper. In fact, the raw gut is put into this oil and kept therein until it is to be treated with boiling alcohol. The oil of juniper acts as a solvent of the fatty matters, and therefore may be regarded as an auxiliary to the chloroform. But it is not necessary, and may be omitted.

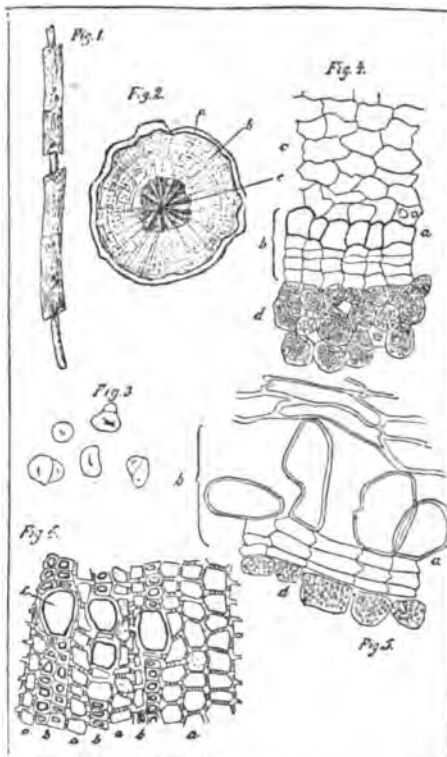
#### BINIODIZED CHLOROFORM.

The biniodized chloroform or "chloroform with biniodide," as it is usually called, is prepared by adding 35 grains of biniodide of mercury (free from lumps) to 5 pounds of pure chloroform contained in a flask provided with an upright condenser, and boiling until the biniodide is dissolved, which requires about half an hour. The solution is then transferred to bottles, which must be well stoppered. This solution is of the strength of 1 in 1,000, and at the ordinary indoor temperature is permanent. When exposed to a temperature of about 60 degrees F. or less, some of the biniodide will separate in beautiful red crystals, but the amount is never large unless the liquid is exposed to great cold. This biniodized solution is at the same time a very delicate reagent for the presence of chlorine compounds existing as contaminations in the chloroform. Any one of these compounds which contain chlorine in looser combination will set free enough iodine to impart to the solution a pinkish or pink tint. The depth of this color, which is characteristic for a solution of iodine in chloroform, is in direct propor-

tion to the amount of contaminating chlorine compounds present. Sometimes the tint is developed at an early stage, during the boiling of the chloroform with the biniodide. Again, it may make its appearance gradually. It is not believed that the presence of these contaminating bodies has any deleterious influence upon catgut which might be treated with the solution, but the writer has preferred, whenever the pink color revealed itself, to make another use of the solution—namely, to recover the chloroform by distillation and to set it aside for use in chloroform liniment or for other external or coarser purposes.

#### A New Adulteration of Senega Root.

In the early part of 1894, Ad. Andrée of Hanover drew attention to an interesting adulteration found in senega root imported from New York, the drug con-



THE ROOT, CROSS SECTION AND MICROSCOPIC STRUCTURE OF *TRIOSTEUM PERFOLIATUM*.

taining nearly 25 per cent. of foreign root which he referred to as *Richardsonia scabra*. The structure of the drug, however, showed this identification to be incorrect; the starch in the two roots differed in character, and in the *Richardsonia* the oxalate of calcium assumed the form of raphides, while in the adulteration referred to it was present as cluster crystals. C. Hartwich, *Archiv. der Pharm.*, believes the root to be that of *Triosteum perfoliatum*, L., Caprifoliaceæ, which has recently appeared as ipecacuanha. Externally the roots showed the greatest similarity, and the histological and chemical examination proved their identity.

*Triosteum perfoliatum* is indigenous to the eastern and southeastern United States, and might therefore easily be collected with senega, although the two

plants are very different in appearance. *Triosteum* is a shrub with a thick knotty rhizome, from which arise several stems reaching nearly 8 feet in height; it is known in America as tinker's weed, bastard ipecac, etc., and is used somewhat extensively as an antipyretic, purgative and emetic.

The drug consists of a yellowish brown or dark brown bent, knotty rhizome to the sides, and under surface of which are attached numerous roots, generally not over  $\frac{1}{4}$  ccm. thick, and often much thinner; these are lighter in color than the root stock, show here and there transverse fissures (Fig. 1), and resemble many varieties of false ipecacuanha, especially *Richardsonia*. In general appearance it is so like senega that its presence seems to have been overlooked; it differs, however, in the absence of a keel.

The structure of the root is very characteristic. A transverse section (Fig. 2) exhibits a radiate wood without pith and a cortex, in which a narrow pale outer portion can be easily distinguished from a darker inner part. Next to the cork is a layer of large compressed cells (primary bark), containing here and there a cluster crystal of calcium oxalate. Between this and the secondary bark is a layer of four or five rows of cork cells, the outer of which have undergone an unusual radial elongation (Figs. 4a and 5), in consequence of which the primary bark has become compressed, and is eventually thrown off. The cortex contains numerous cluster crystals of calcium oxalate and starch in compound or simple grains reaching 0.015 mm. in length (Fig. 3). The wood is remarkable for the fact that the medullary rays are lignified, while in the xylem rays only the middle lamella yields the lignin reaction.

The *Triosteum* root contains an alkaloid which Andrée considered identical with emetine. Hartwich, however, was unable to obtain the characteristic reaction with hydrochloric acid and chlorinated lime and concludes, therefore, that the alkaloid is not emetine.

#### Toothache Drops.

The following is a carefully selected collection of formulas for toothache drops from the *American Medico-Surgical Bulletin*:

- 1.—Oil cajuput (rectified)..... Parts.  
Oil cloves..... of each...1  
Chloroform.....2
- 2.—Camphor..... 3 ij.  
Choral hydrate..... 3 ij
- Triturate till liquefied; then add  
Spiritt peppermint..... to make fl. 3 iv
- 3.—Oil cloves.....  
Tinct. cannabis indica..... } equal parts  
Chloroform.....
- 4.—Oil peppermint.....  
Spiritt ether..... } equal parts  
Tincture opium.....
- 5.—Menthol..... 3 ij  
Ether..... fl. 3 iv  
Oil cloves..... fl. 3 ij  
Fl. ext. aconite..... fl. 3 j
- 6.—Fl. ext. Jamaica dogwood..... Oj  
Oil peppermint..... mxx  
Ether..... fl. 3 j  
Parts.
- 7.—Creosote..... 2  
Chloroform..... 2  
Wine opium..... 4  
Tincture benzoin..... 1
- 8.—Oil eucalyptus..... fl. 3 j  
Mastic..... 3 ij  
Camphor..... 3 iiss  
Morphine (alkaloid)..... 3 iiss  
Chloroform..... fl. 3 ij  
Alcohol..... to make fl. 3 v  
Parts.
- 9.—Camphor..... 1  
Chloroform..... 9
- 10.—Oil cajuput (rectified).....  
Tincture opium..... } equal parts.



grains) of eucaïne can be injected without trouble; while of cocaine the similarly safe dose is only 0.01 gm. (1-6 grain). Solutions of 1 to 6% in sterilized water are permanent at the ordinary temperature of the room. They remain clear without the addition of carbolic or salicylic acids and do not become flocculent as cocaine does, and, finally, it is intended to put eucaïne on the market at a price considerably less than that of cocaine.

**The Cause of the Coloration of Syrup of Hydriodic Acid.**—In a paper presented by Donald L. Cameron, at the recent meeting of the New Jersey Pharmaceutical Association, the author gave in detail the results of a series of experiments made by him a year or so since with a view to determining the cause of the coloration of this syrup. He had not published the rest of his work at that time, as just after concluding his experiment he learned that O. A. Rouillion had also been working on the same subject at the same time, and that both Mr. Rouillion and himself had arrived independently at practically the same conclusion,\* namely, that the color developed is nearly always due to the oxidation of the syrup, which results in the formation of caramel, and this color can be removed without detriment to the therapeutic qualities of the syrup by adding about ½ ounce of animal charcoal to the pint of syrup, agitating, allowing to settle for 15 minutes, and then filtering. If any free iodine should be present this treatment will not remove the color, and in this case of course the syrup should not be dispensed but should be thrown away, as it is valueless.

**Cloudiness in Antitoxin Serum.**—Tser-shgowski states (*Vratsch*) that precipitation or cloudiness in serums does not necessarily depend upon the presence of bacteria, but may be due to the method of preparing the serum. One of the causes is the occasional lack of care in not separating completely the fibrin from the blood, which is occasionally not completely separated at the end of three days. This slowness in separating may be due to excessive bleeding or to hunger on the part of the animal immediately before it is bled, which causes a reduction in the number of the white blood corpuscles. It may also be due to an affection of the kidneys, brought about through the treatment in immunizing the horse. Another class of causes for the cloudiness is the change in the quantity of alkali present, or change in the quantity of the albuminous and fatty substances in the serum and fatty bodies.

by means of the same reagent as that used for the detection of nitric acid in the cold and tartaric acid when heated. He directs the following method of procedure: Put 1 or 2 drops of the solution to be examined into a test tube with 2 ccm. of pure sulphuric acid; cool by applying water to the tube, and shake. After cooling add without shaking 5 drops of resorcin sulphonic acid solution. Again cool the liquid and shake, when if chlorates be present in not more than 2 per cent. strength, a green coloration will be produced, which is clearly perceptible in the presence of as little as 1 100 mg. Under the same conditions nitric acid produces a pale yellowish color, turning to reddish violet upon heating. Similarly nitrous acid produces a violet blue coloration, and thus obscures the reaction, it is necessary to remove any nitrites before trying the test. For this purpose Denigès recommends the addition of the volume of the solution of antitoxin to filtration and the addition of a few drops of acetic acid. Take a few cubic centimeters of this solution, evaporate and then carry out the test as above. The reaction is a specific one for chlorates, and does not occur with bromates as does that with chlorates. It should be removed by treatment with sulphuric acid. The solution freed as above of nitric acid, it being added 2 drops of this solution of sulphuric acid, and then of a saturated solution of sodium phosphate. If nitrates be present, a known color reaction varying from a yellow to a brown according to the amount present.

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CLEARING NUT.

Understanding the venomous nature of the seeds of strychnos whence the clearing nut is derived, the seeds of this species (*S. potatorum*) are used for clearing muddy water. The person who ever drink clear well water if he get pond or river water which is always impure, according to circumstances. One of the seeds of the clearing nut is well rubbed for a minute around the inside of the vessel (usually an unglazed earthen one) containing the water, which is then left to settle. In a very short time, the impurities fall to the bottom, leaving the water clear. Bitter almonds, by the way, are said to be employed for the same purpose in Egypt, and those of kola or sterculia in Sierra Leone. Dr. Pereira states that the efficacy of the clearing nuts depends upon their albumen and casein, which act as fining agents, like those employed for wine or beer.

WHISKY ROOT.

A plant belonging to the genus *Anhalonium*, of the order *Cactaceae*, which has long been known by the name of whisky root, from its effects on the system, which resemble those produced by alcoholic drinks, has recently attracted some attention as a stimulant and nerve tonic new to materia medica. The part of the plant used is what is popularly called the "button." This is sliced by the Indians of Southern Texas, and the small pieces being chewed and the juice swallowed, the intoxicating effects follow, it is said, in about the same time as would those of a drink of whisky. The Indians sit for hours enjoying the beautiful visions of color and other manifestations caused by the intoxication. There are several species of the genus,—one of which was known to the Aztecs as *payotl*, and the intoxicating effects of which are briefly described by Sahagun.—*Hist. Universal de las Cosas de Nueva España*.



We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of any unusual compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the labels used on packages of the compound should also be sent.

**Writing on Marble.**—L. F.—Engravers and marble workers generally carve the figure or writing upon marble, leaving the characters somewhat sunken below the surface. They then warm the marble plate and pour into the lines melted black sealing wax, filling the lines full enough to have the wax standing slightly above the surface. The whole is then ground down to a level surface and polished with pumice stone.

**Collodion Lacquer.**—R. P.—This may be made by adding 1 ounce of castor oil to 1 quart of collodion. It is used generally as a mop varnish. The flexible collodion of the Pharmacopoeia will be found to make a good lacquer or varnish and is probably superior to the simple solution of castor oil in collodion described above.

**Bead Oil.**—Inquirer.—This, according to Fenner's Formulary, is made by rubbing 1 ounce of the finest olive or almond oil with 1 ounce of sulphuric acid in a mortar, gradually added, and when entirely combined adding sufficient cologne spirit to dissolve it about 20 ounces being necessary. Two or three ounces of this is used in a barrel.

**Violet Dentifrice.**—L. S.—The following is a typical formula:

Powdered orris root..... §ij  
Powdered cuttlefish bone..... §iv

Sodium bicarbonate..... each..... 3ss  
Powdered pumice..... 3viij  
Powdered starch..... 3viij  
Powdered chalk..... 3xix  
Violet extract..... 3xj  
Color and mix with a mixture of indigo and carmine.

**Wart Powder.**—L. B.—The following has been recommended as a topical application to warts and growths of this character:

Salicylic acid..... 5  
Boric acid..... 15  
Calomel..... 80

The powder is rubbed into the wart three times a day.

**Witch Hazel Ointment.**—P. K.—The formula for this article was originally published in this journal. It stands thus:

Lanolin..... §iv  
Petrolatum..... §xij  
Glycerin..... §v  
Distilled extract witch hazel..... §ij  
Boroglyceride, 60 per cent. solution..... §ij

Mix the lanolin and petrolatum; add the glycerin and boroglyceride; lastly, add the extract of witch hazel. Perfume to suit; lavender and rose are favorites.

**Violet Water.**—L. S.—A cheap violet water may be made by mixing the following:

Tincture of orris root..... fl. 3x  
Rose water, triple..... fl. 3r

thy, is... the object... the first... the water... the tea... which of... the gut... firm, that... and perme... solvent of... And it was... the city of

Numerous... prepared... but in no... living... some years... to set in... rived from... pected, and... this had been... on examining... stances which... vealed the... results were... new deemed... d, and... a preliminary... their... with enough... thus... hand... first... of... great age... among the... the remark... because... of the kind... it have... the city of

... (the genus... upas tree)... India by the... A branch is... the length and di... It is soaked... with clubs till... from the wood. This... of the bark is... and pulled down till... off, with the exception... to form the bottom... sacks are in general... India.

LACE BARK TREE.

... producing the well-known... Jamaica is called in that is... of Lagetto. The inner... tree (the scientific name of... *Agave lintearia*) consists of... concentric layers of fibers... terlace in all directions, and... a great degree of resem... lace. It is said that Charles... as a present, from the gov... of Jamaica, a cravat, frill and pair... made of this material, and it is... day used for bonnets, collars and... articles of apparel by Creole ladies.

SEEDS AS WEIGHTS.

The beautiful black spotted scarlet seeds called love pease (*Abrus precatorius*), which are much used for necklaces and other ornamental purposes, are employed in India as a standard of weight under the name of "rati." The weight of the famous Koh-i-noor diamond is known to have been ascertained in this way. The seeds of the carob tree (*Ceratonia Siliqua*) are said to have been the original carat weights of the jewelers.



Oil of bitter almond.....	℥ xv
Oil of neroli.....	℥ x
Alcohol.....	℥ x

A higher priced article is made as follows:

Violet extract.....	fl. 3iv
Cassie extract.....	fl. 3iss
Rose extract.....	fl. 3iss
Tincture of orris.....	fl. 3j
Essence of bitter almond.....	℥ x
Cologne spirit.....	fl. 3xxv
Distilled water.....	fl. 3vii

**A Supersaturated Solution of Sodium Phosphate.**—R. L.—A solution of sodium phosphate containing in each teaspoonful 75 grains to 85 grains of the salt may be made after the following formula:

Sodium nitrite, crystals.....	Parts.
Citric acid, crystals.....	5
Sodium phosphate, granular.....	18
	85

Have the mortar very warm or hot. Mix the sodium nitrite crystals and acid citric crystals, and triturate until liquid, then add the granular sodium phosphate and triturate for a few minutes until semi-liquid; then transfer to a wide mouth bottle, cork tightly, keep in a warm place, shake well occasionally, until dissolved, and filter.

**Raines Law Inquiries.**—G. W. A. propounds the following:

"What may a licensed pharmacist do with alcohol and liquors if he neither takes out a liquor license nor pays the \$25 Government tax? Can he keep them for manufacturing purposes?"

"What can he do with them if he pays the \$25 Government tax but takes out no liquor license? These supposed cases in New York State and in country districts."

The Internal Revenue tax is only exacted where alcohol is sold as alcohol. It is not necessary to take out a Government license for the storage of alcohol intended for use in manufacturing.

It is our impression that a druggist who pays the Internal Revenue (Government) tax for the sale of alcohol does not require to take out a State license, the Raines law making the sale of alcohol for medicinal, chemical and manufacturing purposes exempt from taxation. The point has, however, not yet been decided by the excise authorities.

**The Tincture of Aconite of the New Pharmacopoeia.**—A. S. W. writes: Can you explain to me and others the reason for the change in menstruum of the tincture of aconite of the Pharmacopoeia of 1890? Alcohol and water are ordered in place of alcohol. The color of the tincture made in this way is quite dark, and the tincture has but a slight sting. A physician who purchased some of the tincture did not believe it was aconite. I know that it is, for I made up two lots to satisfy myself. It does not look like that made from strong alcohol, but I am at a loss to know why it does not taste the same. I send you a small sample by mail, and shall be pleased to have your explanation in the next issue of the AMERICAN DRUGGIST.

The sample of tincture submitted by our correspondent certainly presents a darker appearance than the tincture we have been accustomed to; but a test of its numbing effects on the mucous membrane of the lips showed it to be quite active. The fault, if any, does not, in our opinion, lie with the menstruum, which was selected by the Committee on Revision of the Pharmacopoeia after most careful trials by a sub-committee, of which Professor Remington was chairman. Reference to the chairman of the

Committee on Revision of the Pharmacopoeia elicited the information that no difficulty has been experienced by others in making a satisfactory tincture by the 1890 process. It is suggested that the aconite used by our correspondent was of poor quality, or the menstruum was allowed to pass through the powder too quickly.

**To Retain the Polish on Aristo Photographs.**—J. P. M.—To retain the high finish of aristotype or chloride paper, it is necessary to press it out on a highly polished surface while wet and to allow it to dry and curl away from the plate by itself, and for this purpose a plate of tin or iron with a finely japanned surface is generally used, although a polished plate glass surface will answer. After this is done, however, the high finish of the paper is frequently lost when it is to be applied to the card back. This can be obviated by pasting to the back of the print while it is still on the surface on which it is pressed out, and while still damp, a piece of thin writing paper of the same size as the print. As soon as this cover paper on the back of the print it thoroughly pressed against the print it-

self, a concentrated warm solution of acacia or of glue should be applied to the back of the cover paper. When the print is thoroughly dry it can then be removed from the polished surface and will retain its own polish and can be applied in the usual way to the card back, taking care not to apply too much moisture to the layer of glue or mucilage on the back of the picture, and to lay a perfectly clean cloth over its face when pressing it down on the card. The additional piece of writing paper used as a backing may be omitted if you will apply several coats of mucilage to the back of the print in succession while it is attached to the squeegee plate, as the surface on which the print is placed is sometimes cold. Paraffined paper is also better to place over the surface of the print when it is to be attached to the card, as it can then be placed in a copying press and pressed more firmly against the backing without danger of spoiling the polished surface. It might be noted, however, that the popularity of the aristo and other highly finished papers appears to be on the wane. The papers with matt surfaces present a more artistic appearance.



## Advertising Aid, how, when, and where to Advertise.

PRACTICAL HINTS AND SUGGESTIONS. CRITICISM AND CONSTRUCTION OF ADVERTISEMENTS.

In Charge of Ulysses G. Manning.

The department editor will be pleased to criticize any advertisements submitted and to suggest improvements. Questions answered and advice given. Our readers are cordially invited to avail themselves of this help.

### GUARANTEEING.

**A** DRUGGIST recently said to me that he doubted the advisability of guaranteeing his special preparations. He feared it would be placing a premium on dishonesty.

It doubtless leads to imposition sometimes, but the merits of the plan more than balance the disadvantage. The fact of the matter is that no druggist can afford to put out a special preparation that will not stand guaranteeing. People will buy it because they have certain confidence in the dealer, and they must be made to feel that if the preparation fails it is not because merit is lacking, but because of special conditions existing in their cases. No matter how good a remedy the druggist makes, it is going to fail sometimes. If the customer uses it on the maker's recommendation, he is entitled to results. If results are lack-

ing, he is entitled to his money, and is going to get it if he asks for it, whether the remedy was guaranteed or not. If you are going to do the fair thing when you are asked to do it, why not do it in the first place and enhance your reputation for fairness?

If you recommend your preparation for a certain thing and it fails to accomplish it, the customer feels a sense of wrong. You can't afford that. If he knows that he can have his money back, he may come for it and he may not—probably not—but knowing that he can have it, he absolves you from any responsibility in the failure.

The greatest value of the guarantee is the confidence it inspires. You can claim merit and dilate on value as much as you like; you can cry best, best, until you are black in the face, and people will doubt. But say, "Money back if it fails," and your words have weight.

It is a hard, definite fact that people can get hold of. It is all arguments condensed into one.

A good many live dealers go farther and say, "Money back if you want it" on everything in the sundry line. I notice that many of the readers of this journal make this offer. It is good business and good advertising. I reproduce here two of the ads of Jas. S. Robinson of Memphis, Tenn. He has one of the best stores in the country, is a thorough business man, and has been very successful. I am sure that he means every word of these ads, and that his success has been largely due to the broad gauge business methods here indicated.

In practice, this plan of guaranteeing goods is not beset with the difficulties

## Narrow Folks

and short-sighted dealers don't like to be criticised.

We do, if there is the least shadow of pretext for it.

By listening for years for the faintest notes of discontent, we've learned to give people what they want, need, or expect.

This is a modern drug store. If there is ever apparent cause for dissatisfaction, tell it. You will find us taking your part.

Robinson,  
Apothecary,  
Masonic Temple.

that the timid dealer is apt to imagine. Few people like to return goods when they feel that the dealer is honest. It's being cheated that hurts.

I know of a patent medicine company that sold 100,000 or more packages of their remedy, under the most positive guarantee. They had a good remedy, but knew it would not cure more than 75 per cent. of the cases. They were perfectly willing to refund where it failed; yet they never had applications for return of the money from more than 100 people.

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## Criticism and Comment.

A NEAT CIRCULAR.  
NEW ALBANY, IND.

ULYSSES G. MANNING:

Dear Sir:—Availing myself of your offer, I shall be pleased to receive your opinion of the enclosed circular. I have distributed it from house to house and sent it through the mails. Don't criticise me too hard if you notice that I have copied part of it, for it is my first effort. My printer is anxious to get your opinion, as he is very proud of it. Geo. E. TRUNK.

This is a very neat little circular, printed in blue on pink French folio. The setting and presswork are both excellent. The printer has shown unusual judgment in the selection of harmonious type faces, but I should have liked it a trifle better had only two or three styles of type been employed.

I am sure that the neatness and brevity of the circular will insure its being read. As to results from it I am not so sure. It is almost too brief. I believe that people would read a little more just as readily, and that some additional information about the store, service of goods, could be profitably given. The circular practically says this:

"We keep the best drugs; your prescription will receive proper attention here; our flavoring extracts, spices, etc., are pure."

Now, if these statements could be clinched by a little information or argument, they would have more weight. There is always much that could be said about any store. The owner invariably feels that he is more deserving of trade than his competitor. If questioned on the subject he would give a dozen valid reasons for this. If a man really feels that his store is deserving of patronage, there is no reason why he should not tell fully and explicitly why it is deserving. If he is a graduate in pharmacy, if he has had long experience, if he uses assayed drugs, if he has a system of checking in his prescription department, if he tests his spices, or if he is willing to sell his flavoring extracts on the "satisfaction or money back" plan, he ought to say so. Such information can be very briefly given. Simply see to it that your chain of argument or evidence is complete. Your circular is talking for you, to one person at a time, in places where you cannot be. That circular is most effective that talks as you would talk were you face to face with the person arguing your ability to serve him.

The only sentence in this circular that is open to criticism is the one starting, "You say you know." This sounds just a little as though people were being "jawed." There is a lot of combativeness in some folks. Such people are apt to make a personal application of this, and present the implication that their judgment is warped. You would hardly say just that if you were talking to a customer. If you did you would give offense to many. Better smooth them the other way. Put it in some such way as this: People cannot always judge as to the purity of spices, baking powders and flavoring extracts. If they could, none but pure would be offered for sale. A druggist who knows his business does know about these things. We know, etc.

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## Questions Answered.

I give under this head answers to questions that have been asked by my own clients. There may be points of interest in them for advertisers in general.

We have two papers here. One has more circulation than the other. I don't feel that I can go into both of them unless I take a smaller space than you advise.

Ans. Take a suitable amount of space in your best paper. Use enough space or none. As soon as results warrant it, add the other paper.

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We have no paper here, but the county seat papers circulate quite largely. Space in them costs \$10 an inch for a year. Could I use them profitably?

Ans. No. Use circulars.

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My paper will not allow me to change my ad, but once a month unless I pay extra. They will allow weekly changes for a dollar more a month. Shall I pay it?

Ans. Yes; it will be a good investment. It is probable that few of the other advertisers change oftener than once a month, and your frequent change of copy will attract special attention.

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We have two dailies here. Rates are the same and both claim largest circulation. How am I to tell which is the better?

Ans. There is no way you can tell to a certainty without testing them. As a rule the following tests are reliable: The paper that carries the most ads is apt to be the better. The paper that carries the most ads of the large foreign advertisers is pretty sure to have the largest circulation. A large number of "want" ads in a paper is a good sign. People who use that column can check results. If you see a Royal Baking Powder advertisement in one of your papers, entirely surrounded by reading matter, you can

## Would You Do This

If you were in our place—urge customers to always return any purchase not fully satisfactory, and get their money?

You surely would if you had studied business methods for twenty six years, as we have. No matter what the matter, bring it back.

We aim to sell people just what they want, and even give them a chance to change their minds.

Robinson,  
Apothecary,  
Masonic Temple.

be sure that that paper makes concessions and cuts rates.

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If I offer something as a leader at cost or less, what shall it be—a high-priced or a low-priced article?

Ans. Choose something that is widely used. A low-priced article is best if you sell for cost or less. The advertising effect is just as good and the loss of profit amounts to little.

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My competitor is an old fogey. He has a dingy looking store, but has been here twenty-five years. He is making allusions to me in his ads and prating about his experience. I have been here about one year and am a young man. Am a graduate in pharmacy. He of course is not. How shall I reply to him?

Ans. Don't reply at all. Be totally oblivious to what he says. The fogey is spending his money to advertise you. I doubt if you can do any advertising on your own account that will pay you better. Simply go ahead and advertise as a dignified and up-to-date pharmacist should.

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Our daily here claims a large circulation, but I think its rates are too high. How does a paper fix its rates?

Ans. A paper usually charges what it finds it can get. Taking it the country over, advertisers have to pay the dailies about \$6.50 an inch per year for each thousand of circulation. If your daily has three thousand circulation, its rate for a four-inch space, figured on this basis, would be \$78 per annum.



## NEWS OF THE FORTNIGHT.

### For Free Alcohol.

A stiff fight is on at Washington to prevent the repeal of Senator Hoar's amendment to the Tariff act, providing duty on free alcohol for use in medicine and the arts. We refer to it on this page.

### The Death of Dr. Curtman.

The announcement in our last issue of the death of Dr. Chas. O. Curtman is followed by a portrait sketch of his life in another column. A tribute of recollection from Professor Good, the president of the American Pharmaceutical Association, whose kindly sentiments of esteem will be appreciated by everybody who knew the deceased gentleman, is given on page 288.

### New Jersey Pharmacists.

The twenty-sixth annual meeting of the New Jersey Pharmaceutical Association took place at Lakewood, N. J., May 6, and a full report of the proceedings appears on pages 283 and 284.

### The Situation in Ohio.

The report of the Investigating Committee of the Ohio Senate appointed to examine into the operations of the Food and Dairy Commission, has been presented, resulting in Dr. McNeal's vindication. An interesting summary of the report will be found on page 285.

### Graduated Ph.G.

The commencement exercises of the New York College of Pharmacy are described on page 286. An account of the twenty-sixth annual meeting of the Alumni Association, with portraits of the newly elected officers, follows on page 287.

### American Chemical Society.

The new Chemical Club, the Presence of Bacteria in Milk Sugar, and the Composition and Analysis of Milk formed the subjects of interesting discussions at a regular meeting of the New York Section of the American Chemical Society, held last week, which is reported on page 289.

### Free Alcohol.

#### SENATOR SHERMAN ATTEMPTS TO REPEAL FREE ALCOHOL CLAUSE.

The action of Senator Sherman in trying to have Section 61 of the Tariff act of 1891 repealed has aroused considerable interest among wholesale druggists generally, but as his efforts were not crowned with success they are now breathing easier, and think there is a possibility of them securing what they claim to be their rights. The opponents of this bill are confident that they have it beaten, although this required a stiff fight. It has been conducted with energy and they think they are now in a position to dictate terms to their opponents. The repealing bill has been favorably regarded in both Houses, but it is doubtful if it is to be called up in either. Some of the Senators are of the opinion that the section which guarantees a rebate on alcohol used in the arts cannot be repealed unless other tariff legislation goes with it.

The fight promises to be a hard one, but the opponents of the bill to repeal his section of the tariff are confident that they will come out ahead. Reports were called for some months ago by American Consuls as to the use of alcohol in the arts in foreign countries and from those that have been submitted, it appears that in nearly every case a method has been found for distinguishing between alcohol entering into the process of manufacture and that consumed in beverages. The method of paying rebates proposed is the English system.

### Rhode Island Getting a Dose.

Massachusetts druggists are interested in a bill that came up in the Rhode Island Legislature a few days ago, for an act in amendment of the General Laws. It was referred to the Judiciary Committee which reported back the measure as amended.

It reads in part:

Sec. 52. Authority to sell without license pure spirituous liquors in quantities not to exceed 1 pint, for medicinal purposes only, and not to be drunk on the premises of the seller, is granted to the persons authorized by law to sell medicines and poisons; provided the same shall be sold upon, and in accordance with the written prescription of a physician or, the written order of the buyer thereof, stating the same is for medicinal purposes only; said prescription and written order shall not be refilled, but shall be retained and kept on file by the seller for and during the period of 12 months from and after the date thereof, and during said term shall be open to inspection by any of the officers mentioned in Sec. 17 of this chapter; and provided further, that in towns and cities where no licenses shall be granted under the provisions of Sec. 2 of this chapter, no person shall have authority to sell any of the intoxicating liquors enumerated in Sec. 1 of this chapter for any purpose whatsoever, without a license first had and obtained according to the provisions of Sec. 53 of this chapter.

A strong opposition to its passage

greeted the bill, and it was finally, after a long debate, referred back to the committee. It is claimed that under the proposed act, no druggist, unless he obtained a license from the Town Council, could keep liquor or wines, or any of the wines of cocoa, etc., on his premises for any purpose. The one druggist who might get the favor would have a monopoly. The druggists in the Massachusetts towns on the border of the State would be likely to come in for a share of the patronage.

### Bachelor of Pharmacy at the St. Louis College of Pharmacy.

ST. LOUIS, May 8.—At the last meeting of the St. Louis College of Pharmacy a step was taken which will be of great interest and importance to many former and future students of the college. The college has decided to confer the degree of Bachelor of Pharmacy, Ph.B., upon all students of the college who complete the full course, including all the laboratory work, but who have not clerked the required four years in a retail pharmacy. Those who receive the degree of Ph.B. may exchange this for the Ph.G. upon completing the four years' experience and passing the examination in practical pharmacy at college. All of those former students who have completed the course at this college, but were excluded from graduation on account of the experience clause, may appear next spring, or any subsequent spring, and receive a diploma and the degree Ph.B. Every year there were a large number excluded from graduation by this experience clause, and the college has long felt the need of this newly made regulation.

### DR. CHAS. O. CURTMAN.

#### A SKETCH OF HIS LIFE.

As briefly announced in our last issue, Dr. Chas. O. Curtman, professor of chemistry in the Missouri Medical College and the St. Louis College of Pharmacy, died at his home in St. Louis, Wednesday, April 22, aged 66 years. The immediate cause of death was heart failure, resulting from an attack of *La Grippe*.

Dr. Curtman, as we learn from an autobiography kindly furnished by Professor Whelpley, was born in Giessen, Hesse-Darmstadt, Germany, July 30, 1829. He received his education in the Realschule and Gymnasium, at Offenbach, and afterwards took a course of study at the University of Giessen, where he was a pupil of Liebig, and in his last semester the assistant of Professor Knapp, the technologist. He afterwards became assistant of Professor Bromels of the Polytechnic School, at Hanau.

In the fall of 1849, while introducing a new process for making acetic acid in an establishment at Antwerp, in Belgium, he resolved to visit the United States and embarked in one of the fast sailing Baltimore clippers, landing in New York. Soon afterwards he went to New Orleans, where he engaged in the drug business for some years. In 1851 he made a short visit to St. Louis, which was then suffering from the vast overflow of the Mississippi.

During the first year of the late Civil War he was army surgeon in a Confederate cavalry regiment, but was soon ordered on special service to establish and conduct laboratories at Arkadelphia, Arkansas; Tyler and Marshall, Texas, where from the native supplies he suc-



ceeded in manufacturing pharmaceutical, chemical and pyrotechnic products for all of the Confederate army.

After the war he first settled in Memphis, Tennessee, then came to St. Louis, at the solicitation of Professor Joseph Nash McDowell to assist in the reorganization of the Missouri Medical College. He was given the chair of chemistry which he held until his death. He was for 11 years professor of chemistry in the St. Louis College of Pharmacy.

Dr. Curtman was a member of the Committee of Revision of the United States Pharmacopoeia, and the chairman of the committee (Dr. Charles Rice) has taken steps toward the preparation of an obituary which will do Dr. Curtman honor and serve as a worthy monument to his memory.

### A Personal Recollection.

BY PROFESSOR JAMES M. GOOD,  
President of the American Pharmaceutical Association.

The resolutions of respect recently passed by the St. Louis College of Pharmacy quite fully express my estimate of

personality, and I appreciate the desire which many might have for a nearer and more intimate view of him. They know that in chemistry, that science to which he devoted his life, he was an unimpeachable authority; but he was not simply and only a chemist, he was an expert apothecary, a skillful physician, and besides these a man of broad and liberal education.

He was modest and unassuming, as is always the case with men who have advanced far enough in learning to appreciate the vastness of the universe and man's limitations. He had skill and industry combined, and those who knew him best were impressed with the thoroughness with which he worked out to an issue everything he undertook. He has left the results in tangible form, and beside the influence upon many minds with which he has come in contact, the world is richer by his contributions to the fund of knowledge. He had positive knowledge on many subjects, relied on his judgment, and could rarely be persuaded that his preconceived opinion on any matter was wrong. Those who differed with him sometimes called him stubborn. He was a good illustration of

In his private intercourse with friends he was genial, had an appreciative sense of the ridiculous, and not infrequently in conversation indulged in witticisms. He was an approachable man, always willing to assist students, answering their questions in a way to leave them feeling comfortable and thankful, however absurd they may have appeared to his mature mind. In this fact we have an explanation of their attachment for him, and as he was master of his science they gave him willing homage. Take him for all in all he was a rare man. The world has too few such.

### Meeting of the New Jersey Pharmaceutical Association.

Laurel-in-the-Pines at Lakewood was a most happy selection as a place for the twenty-sixth annual meeting of the New Jersey Pharmaceutical Association, as was attested by the unusually large attendance and by the general sentiment of those who attended the meeting.

The convention was called to order on Wednesday morning, May 6, by President Chas. F. Dare of Bridgeton, and was welcomed on behalf of the local committee by Dr. Isaac Hall Platt of Lakewood, who, in the course of his remarks, made flattering reference to the debt owed by medicine to pharmacy.

The annual address of the president, containing several important recommendations, was then read and referred to a committee consisting of Messrs. Holzhauer, Horning and Flynn, with instructions to report at a later session.

The reports of the secretary and of the treasurer were then presented and referred to the Executive Committee. The report of the treasurer was particularly favorable, as the funds of the association have been added to materially under the law of 1895, which gives to the State Association a portion of the annual registration fees.

The reports of Albert S. Elwell, secretary, and Wm. Laird, treasurer of the Board of Pharmacy, were also submitted and took the prescribed course, being referred to the Executive Committee.

The credentials of visiting delegates were then called for and the delegates extended the privileges of the floor and invited to make some remarks, an invitation accepted by Donald L. Cameron, W. P. DeForrest and John G. Pfeiffer, representing the Kings County Pharmaceutical Society, and George J. Seabury of the New York State Pharmaceutical Association.

William C. Alpers presented a verbal report as a delegate from the association to the meeting of A. P. A. Messrs. Laird of Jersey City and Fitzgeorge of Trenton and H. J. Lohmann of Jersey City also presented verbal reports as delegates to the Pennsylvania, the New York State and the Kings County Associations respectively.

The papers read by Messrs. Alpers and Reynolds before the New Jersey Medical Society were ordered published in the proceedings of the Pharmaceutical Association and the paper by Mr. Alpers was read before the meeting by special request.

Joseph T. Fitzgeorge presented his report as chairman of the Legislative Committee, giving the details of the circumstances surrounding the introduction and defeat of the Schirm bill, the history



*Chas O Curtman*

Dr. Charles O. Curtman's life and work. The tribute there paid him is a just one. He was a man of strong and positive

the saying among the Germans, that "a man should not change his fixed opinions too frequently."

of which has already appeared in these columns.

The report of the Committee on Trade Interests was also submitted by Chairman G. H. White of Jersey City and took the usual course.

A letter from Prof. Virgil Coblenz of New York acknowledging with thanks the receipt of the notice of his election to honorary membership to the association was read, as was also an invitation for the association to send an exhibit of some kind to the Millennial Exposition at Prague. A letter was also received from Prof. Frank G. Ryan, chairman of the Committee on the Introduction of the Metric System, which was referred to the Executive Committee after an expression of an opinion on the part of the majority of the members favorable to the introduction of the system.

#### AFTERNOON SESSION.

The report of the Committee on President's Address was submitted by Chas. Holzhauer and took the usual course.

A lively discussion arose as to the definition of the term jobber, the president having asked for a more rigid application of the rule as to jobbers' rebates on the part of manufacturing proprietors. The secretary was instructed to ask the National Wholesale Druggists' Association to define accurately the meaning of the word. The secretary was also instructed to request the Senators from New Jersey to favor the passage of the A. P. A. bill, reorganizing the pharmaceutical corps in the United States service.

The question of advertisements in the proceedings of the association was discussed and the general consensus of opinion appeared to be in opposition to soliciting advertisements and subscriptions from jobbers, etc., though the matter was referred to the Executive Committee with power to act.

H. J. Lohmann submitted his report as chairman of the Committee on Queries and Papers, which dealt principally with the preparations of the National Formulary. Each member of the association had been requested to prepare a 4-ounce vial of some designated preparation of the National Formulary. It was proposed that a full set of these preparations be put into uniform containers, suitably displayed in a stand and exhibited by the New Jersey Pharmaceutical Association at the meetings of the various medical societies throughout the State. It was also recommended that members at or near the places of meeting of the medical societies arrange to have at least one member in attendance to explain the purport of the display. The recommendation was adopted and the Executive Committee authorized to make the necessary expenditures entailed in fitting up the display.

#### THE DETECTION OF ACETANILID IN ANTIPYRINE AND PHENACETINE.

Donald L. Cameron of Brooklyn read a paper in reply to the request for "A ready method for the detection of acetanilid, when used as an adulterant of phenacetine, antipyrine, etc.," which is printed in full on page 274 of this issue. Mr. Cameron also presented a note on the coloration of syrup of hydriodic acid, an abstract of which is given on page 276.

H. J. Lohmann read a paper on resin of podophyllum, which evoked an interesting discussion, since Mr. Lohmann's ex-

periments led him to believe that fresh podophyllum root contained practically no resin, the resin being produced only after ageing the root six months and more.

The question of the association making a display of N. F. preparations at the meetings of the medical societies was here broached and settled in the affirmative, as indicated above.

John G. Pfeiffer of Brooklyn stated that in making the compound elixir of pepsin of the National Formulary the process can be accelerated by filtering the acid aqueous solution of pepsin before adding the pepsin, instead of afterward, as now directed. He also criticized the color imparted by the use of tincture of cudbear. He had found that a mixture of equal parts of tincture of cudbear and solution of carmine gave a beautiful color when mixed with water alone, but the amount of acid present in the pepsin solution is so large that the effect of this combination is destroyed.

The session was then adjourned.

#### THE BANQUET.

At 8 p. m. the members and guests of the association assembled in the ladies' parlor and from thence marched into the dining room, where a tasteful and well prepared banquet was served. A welcome innovation was the omission of the time-honored after dinner speech making, the company adjourning directly after the banquet to the music room where, after an interesting exhibition of fancy dancing by a little girl of six years, general dancing was indulged in for an hour or so.

#### SECOND DAY'S SESSION.

After the opening of the second day's session the Publication Committee was instructed to publish the names of all druggists in the State who had re-registered.

The Executive Committee reported a number of bills as being correct and they were ordered paid.

#### THE PHARMACY BOARD QUESTION.

The Executive Committee reported the following as the five names to be submitted to the Governor from which to select a member of the Board of Pharmacy: A. C. Parisen of Perth Amboy, H. J. Reynolds of Plainfield, H. J. Lohmann of Jersey City, E. M. Walling of Vineland and G. H. White of Jersey City.

This report elicited some discussion concerning the legal status of the Board of Pharmacy and the following facts were brought out: When the pharmacy act was last changed some claimed that an entirely new act was passed necessitating the appointment of an entirely new Board of Pharmacy. This view was held by the Executive Committee of the association, who sent 15 names to the Governor last year from which to select a full Board, though President Parisen in his address seemed not to coincide with this view. The Governor to whom the 15 names were submitted failed to make any appointment at all, but his successor, the present incumbent, did appoint an entirely new Board.

An official copy of the new pharmacy law received by A. S. Elwell of Bridgeton, secretary of the old Board, speaks of the act as an amendment, and acting on legal advice in the matter Mr. Elwell has declined to turn over the papers of the Board to the new Board until its

legality has been passed upon by the Attorney General.

Dr. Summerhoff of the New Jersey College of Pharmacy, at Newark, presented the claims of that institution to the good will of the members of the State association.

The Committee on Nominations submitted a report which recommended the election of the following officers, which was accepted, adopted and the officers elected:

President, H. O. Ryerson of Newton; vice-presidents, C. P. Smith of Newark and Chas. A. Bye of Lakewood; secretary, J. T. Fitzgeorge of Trenton, and treasurer, J. C. Field of Somerville.

After installation of the newly elected officers the association adjourned to meet in Princeton on a date to be fixed by the Executive Committee.

#### ENTERTAINMENT.

Immediately after adjournment the entire company took a long drive through the beautiful woods surrounding Laurel-in-the-Pines, and then ate luncheon in a grove near the hotel. After luncheon impromptu games of foot ball, base ball, quoits, etc., were organized, and the members and guests were delightfully entertained until train time in the afternoon. It was supposed that the party were safely embarked on the train, which was just about to pull out, when a tandem bicycle came in sight, a professional rider on the rear seat, the front seat being occupied by a wild eyed man, who, with clenched teeth, pale face and fluttering whiskers, was taking perforce, his first bicycle ride. The tandem was cheered loudly as it stopped, while Mr. DeForrest of Brooklyn stepped from it barely in time to catch the already moving train, which bore the members away from what was one of the most successful and enjoyable meetings in the history of the association.

#### Meeting of the Georgia Association.

The twenty-first annual meeting of the Georgia Pharmaceutical Association was opened on Tuesday, May 5, at the Music Hall, on Peach Tree street, Atlanta, with President David Curry in the chair.

The proceedings opened with prayer, which was followed by an eloquent address delivered by Henry T. Richardson, editor of the *Atlanta Journal*.

President Curry delivered an able address, which took the usual course. Fifty new members were admitted to the association, and 40 additional names were proposed, which were acted upon later.

The reports of the secretary and the treasurer were presented, the former showing a total present membership of over 350.

Among visiting delegates from outside the State were Professors Remington and Ryan of the Philadelphia College of Pharmacy, Dr. Geo. A. Sloan of Indianapolis and I. J. Benjamin of New York, and a number of representatives of the different wholesale drug houses and manufacturing pharmacists.

Dr. H. R. Land read a paper on the query, "Is it advisable for the State board of pharmacy to establish an educational qualification of the licentiates?" George F. Payne read a paper on the question, "What steps should be taken to secure to pharmacists in the army and navy the proper recognition?" In a well prepared paper Dr. J. A. Solomons discussed the question of "What method

should be used to get the best therapeutical effects from saw palmetto berries?" A paper on "The Formula for Chatham Artillery Punch" was read by J. Kieffer. Dr. J. W. Goodwyn presented a paper in reply to the query, "What amendments are needed to pharmacy laws as they now stand?" Dr. I. D. Persse discussed "The best methods of preparing spirits ammoniac aromaticus."

After the reading and discussion of the papers, officers were elected as follows: I. A. Solomon of Savannah, president; C. O. Tyner, M. S. Elkin and T. Joerger, vice-presidents; Dr. C. J. King, secretary, and M. H. Taylor, treasurer.

Mr. Arrington, the retiring secretary, was given a vote of thanks for the able manner in which he has filled the responsible office.

The only lady member of the association, Mrs. M. H. Taylor of Macon, read a paper in response to one of those read during the morning session. At the conclusion of her paper she was loudly applauded, and presented with a bouquet of beautiful flowers by the gentlemen of the association. Mrs. Taylor's paper was one of the most interesting read during the day and was highly commended.

#### A GEORGIA BARBECUE.

The association adjourned at 1 o'clock to go to Cave Springs, a beautiful place 6 miles out of the city, where a genuine Georgia barbecue was tendered them by the local druggists. The barbecue was thoroughly enjoyed by all, and brief speeches were made by Mr. Richardson of the *Journal*, Professor Ryan of Philadelphia, I. J. Benjamin and Dr. F. King of New York, Dr. Geo. F. Payne of Atlanta and President-elect Solomon of Savannah.

The Wednesday morning session was devoted to routine business, including the installation of officers.

The success of the meeting was largely due to the efforts of the local committee, consisting of Harry Sharp, Chas. O. Tyner, R. A. Brown, Dr. Goodwin and Dr. Geo. F. Payne.

Souvenir buttons were presented to all by the Lamar, Rankin & Lamar, Drug Co. of Atlanta. At the invitation of the exhibitors of various pharmaceutical specialties most of the party visited the exhibition prepared for the meeting of the Medical Association.

that the department shall receive specific appropriations instead of depending upon the collection of fines and costs for its maintenance.

#### OFFICERS OF THE COMMISSION MAKE A PATENT PILL.

"From the investigation of the acts of Charles T. P. Fennel, G. G. Luebbing and J. A. Sterrit in Cincinnati, the following facts were learned: W. W. Thomas, wholesale dealer in groceries and spices, had been prosecuted by the department on several charges of selling impure and adulterated goods, and was convicted. Thereafter, Charles T. P. Fennel, G. G. Luebbing and J. A. Sterrit entered into a co-partnership with W. W. Thomas, without the knowledge of Dr. McNeal, a partnership known as the World's Medicine Company, for the manufacture of a certain pill. Thomas alone invested money to the extent of \$500, with the promise that each of the other members of the company would invest a like sum. One hundred dollars was paid to Charles T. P. Fennel prior to his entering the partnership. It is claimed by him that it was paid for the analysis of the pills. Dr. J. A. Sterrit received \$250 for the formula, and the rest of the money was left with Luebbing, the most of which, it is claimed, was expended for pills and other expenses of the company. No money was paid into the partnership by either Fennel, Luebbing or Sterrit. After the partnership was formed, there were no more prosecutions against Thomas. Fennel claims that the goods of W. W. Thomas have been inspected and found pure. As it appears that the partnership still exists, the committee is of the opinion that such relation between the officers of the department and person liable to inspection and prosecution under the law is wholly inconsistent with the best interests of the department, and the retention of individuals holding such relations is not conducive to a proper and effective enforcement of the laws.

## Affairs in Ohio.

### Senate Investigating Committee Reports on Ohio Dairy and Food Commission—

White Paid \$5,000 to Escape Prosecution for Sale of Paskola—Judge Dye To Be Dismissed—Officers of the Commission Engage in the Manufacture of a Patent Pill—Dr. McNeal's Course Upheld—Committee Says the Operation of the Pure Food Laws Has Been Beneficial to the People of Ohio.

CINCINNATI, OHIO, May 5, 1896.—On April 27 the Special Legislative Committee appointed to investigate the workings of the Ohio Dairy and Food Commission made its report at Columbus. The report was submitted to both branches of the House and was adopted immediately. Dairy and Food Commissioner Dr. McNeal and his attorneys were present in the Senate Chamber when the report was read. The committee recommended that Judge Amos Dye, who was charged with accepting \$5,000 from A. J. White, president of the Predigested Food Company of New York, to stop proceedings against the latter for the sale of Paskola, be dismissed from the service of the department. It was also reported as the sense of the committee that Messrs. Luebbing, Fennel and Sterrit should either sever their connection with the so-called World's Medicine Company or with the State Dairy and Food Department.

#### DR. McNEAL ON THE FINDINGS OF THE COMMITTEE.

In speaking of the findings of the committee, Dr. McNeal said: "As regards myself, I could not have asked for better treatment or a more substantial indorsement. As regards Judge Dye, I shall dismiss him at once, as the committee recommends. It was not my opinion that Judge Dye received the \$5,000 from A. J. White, but the committee thought differently, and I shall submit to their decision. As regards the World's Medicine Company, I knew nothing about Dr. Sterrit and Messrs. Fennel and Luebbing being connected with it, or with W. W. Thomas. I approve of

the committee's finding in that particular, and all I have to say is that the gentlemen must either sever their connection with the company or the Dairy and Food Commission of Ohio."

#### DYE TO BE DISMISSED.

Among other things the report says: "As to the charge of A. J. White that on May 6, 1895, he paid Amos Dye \$5,000 to escape further prosecutions for the sale of Paskola in Ohio, the committee is of the opinion that the preponderance of evidence supports the charge of White that the money was paid by him; in consequence thereof the dismissal of Dye is recommended. Evidence has been produced showing that some of the inspectors of the department have received presents from parties who were prosecuted. Your committee, while realizing that these presents were trifling and should not influence an officer to neglect his duty, yet we are of the opinion that the attaches of the department should decline all presents and thus avoid the appearance of being improperly influenced. The most serious objection as to the general conduct of this department was raised in connection with the method of settling cases out of court. Complaints are made that the officers of the department unduly urged the settlement of cases for the purpose of collecting fines and costs, while some instances have been presented which tend to show such acts probable, yet your committee is of the opinion that there has been no general practice of the acts complained of. The cause for such complaints has been removed by the passage of Senate Bill No. 232 by Mr. Whittlesby, which requires

#### DUTIES FEARLESSLY AND HONESTLY PERFORMED.

"The operation of the pure food laws have been beneficial to the people of Ohio in that the sale of many impure and adulterated goods has been driven from the State and the use of labels has made it difficult for dealers to impose on customers. Dr. McNeal, the head of the Dairy and Food Department, has administered his office with the sole aim of properly enforcing the laws, and it is largely through his strict construction of the laws and his personal integrity in the work of his department that have made them so successful. The complaints generally made against the department are in fact against the use of the discretionary power of the commissioner in dealing with certain cases, and while some instances of seeming hardship have occurred your committee is of the opinion that the commissioner has fearlessly and honestly performed his duties and that any acts of discrimination against or for individuals was not known to or sanctioned by him. While urging that no backward step be taken in the enforcement of the laws your committee recommends that the acts of subordinates be more carefully scrutinized to the end that particular cases of hardship be avoided, and that there be no misuse of power or authority by subordinates."

## JUDGE DYE REFUSES TO RESIGN.

Notwithstanding the report rendered at Columbus, Judge Dye has stated that he will not resign his position as attorney to the department for the Southern District of Ohio. Dye claims that the Legislative Committee was not warranted in asking his resignation, and he says he will employ attorneys to determine his

rights in the premises. One day last week a message was received here from Dr. McNeal, calling Messrs. Luebbing and Fennel to Columbus. It is stated that the two gentlemen, together with Dr. Sterrit, will be asked to either sever their connection with the World's Medicine Company or with the Dairy and Food Department. Dame Rumor has it that they will choose the latter course.

John W. Keller, the editor of the *New York Recorder*, addressed the graduates.

## ADDRESS BY JOHN W. KELLER.

Mr. Keller, who was introduced by the president, said that when he was called upon by Mr. MacMahan with the request to make the address to the graduates, he told him that he knew nothing whatever about pharmacy, whereupon his caller assured him that he then was just the man whom they wanted to listen to on that occasion. Continuing, Mr. Keller said that all the acquaintance he could boast of with pharmacy was a distasteful familiarity with pills. "The pill," he said, "is to the mind of the uninformed public the emblem of pharmacy." Still, he knew of a lady who called her dog Pill because, as she thought, it would be insured against theft, as nobody would want to take him. Mr. Keller quoted the well-worn lines from "Romeo and Juliet," and preceded the quotation with a remark to the effect that he believed Shakespeare had libeled the apothecary of old. He was convinced that in commerce to-day there is no greater factor than the compounder of medicines, and no nobler calling than that of the apothecary. The apothecary is the Good Samaritan of the universe. He congratulated the class on the avocation they had chosen, and the faculty on the showing made there that night. Mr. Keller captured the hearts of the ladies among the audience by demanding for women the right to do such things as men do rightly, this in compliment to the two lady graduates. He brought his address to a close by urging the graduates to enthrone work as their constant mentor. Every success that had come to him had come by hard work, and every failure could have been prevented by work. "Read the Bible," he said, "and study the Constitution of the United States. And remember," he concluded, "a good man never dies; a good woman—well, she is already an angel."

Mr. Keller spoke with all the charming ease of diction and grace of manner which distinguishes the Kentucky gentleman and editor, and his words were interrupted frequently with applause. When he had finished, President Fairchild conferred the degree of Doctor of Pharmacy on the successful members of the post graduate class, whose names are:

## Post Graduate Class.

Charles H. Bjorkvall, New York City.  
Harry B. Ferguson, Little Falls, N. Y.  
Rudolph Gies, New York, N. Y.  
Frank F. Ogden, Middletown, N. Y.  
George H. Jorgensen, New York, N. Y.  
Joseph F. McCarthy, Yonkers, N. Y.  
Christopher Niederer, Jr., Carlstadt, N. Y.

Prof. Arthur H. Elliot, on behalf of the faculty, read the roll of honor of the graduates. Kark Schnackenberg headed the roll. Out of 600 possible points he had made 551, or 91.83 1/3 per cent. Merton J. Coats, the class president, came next, with 550 points and 91.66 per cent. Karl M. Vogel was the next, with 548 points, 91.33 per cent. The remaining ten ranked as follows:

Adolph G. Massman, 545.....	90.83%
Paul O. L. Thielke, 543.....	90.50
David Westheimer, 542.....	90.33%
Erastus W. Bulkley, 533.....	88.83%
Alois Hostomsky, 533.....	88.83%
Louis Protzmans, 532.....	88.66%
Henry Brown, 523.....	87.16%
Guy H. McCoy, 519.....	86.50
John H. Eberhardt, Jr., 517.....	86.16%
Thomas LeClear, 516.....	86.00

The awarding of the special college prizes was made by Mr. Fairchild, who called upon Professor Coblenz to present

## Graduates of the New York College.

Large Class Graduated by the New York College of Pharmacy—A Lady Graduate Wins the Prize for Highest Proficiency in Practical Pharmacy—An Editor Compliments the Graduates on Their Choice of Avocation—Alumni Association Meets in Twenty-sixth Annual Session—Officers Elected.

THE sixty-fifth commencement of the College of Pharmacy of the City of New York took place at Carnegie Music Hall, on the evening of Thursday, May 7. It was after 8 o'clock when the faculty and post graduate class marched on to the gayly decorated stage, the footlights of which were piled high with flowers arranged in various designs. The Seventh Regiment Band, under the leadership of W. B. Rogers, played an elaborate programme of music, and Mr. Rogers, who is a famous cornetist, treated the audience to several selections which were enthusiastically encored. He played on a gold cornet which was presented to him some time ago by President-elect Edward Kemp.

The entrance of the graduating class, which marched down the centre aisle in double file, led by Mr. Atwood, was the signal for loud and continuous cheering. After all had been seated, S. W. Fairchild, the retiring president, arose and welcomed the audience. He then introduced the Rev. Junius B. Remensnyder, who opened the proceedings with prayer. Alfred H. Mason, secretary of the college, then formally read the roll of graduates, as follows:

## List of Graduates.

## NEW YORK CITY.

Frank M. Austen, Joseph Charles Becker, Richard W. Bennett, Maurice M. Berger, William F. Bormann, William S. Branner, Joseph J. Brooks, Frank O. Buell, John B. Cowan, Alexander Deutschberger, Louis A. Drenckhahn, John H. Eberhardt, Jr., Berthold Flesch, Adam Franck, Christian F. Frank, Adam J. Franz, Louis Garbarius, Louis J. Gies, Max Gluck, Benjamin A. Goldlust, Wm. P. L. Gregorius, Louis N. Halpern, Morris Hirschman, Adolph C. Hoeding, Alois Hostomsky, Albert Klingman, Arthur A. Lotz, Charles H. Lowe, Rob Roy McCully, Charles E. Marscheider, John G. Miller, William Morlath, Madge O'Connor, John Novak, Francis S. Perilli, Joseph Pierson, Louis Protzmans, Joseph Rakoff, Clifton M. Rawlins, Emanuel C. Rezza, Charles A. Ricksecker, Adolph G. Riegel, Joseph T. Roediger, John C. Scherding, Frederick P. Schweizer, William J. Sheirs, Benjamin Teitelbaum, Paul O. L. Thielke, David Westheimer, Henry Weidemann.

## BROOKLYN.

Erastus W. Bulkley, Adolph F. Drollinger, Philipp L. Eckhard, Charles G. H. Gerken, Wm. Isemann, Harry J. Scheidt, Karl Schnackenberg, Albert F. Seeker, Adolph Theis, Richard H. Timmermann, Edward H. Uhe, Wm. C. Vincent, Eugene J. Zeiner.

## CONNECTICUT.

Albert R. Adams, Collinsville; Harry D. Cannon, Waterbury; Harold Glendening, Norwalk; Orrin F. Ives, Bristol; Jonathan Morris, Norwich; Werden B. Potter, Woank; Karl M. Vogel, Norwalk.

## DELAWARE.

Alfred H. Coeden, Hazlettville.

## IOWA.

Pierce B. Bear, James T. Cantwell, H. Frank Donnelly, Davenport; William D. Irvine, Waterloo.

## MASSACHUSETTS.

T. Edgar Butterworth, North Adams.

## NEBRASKA.

Frank L. Johanson, Oakland.

## NEW JERSEY.

Edward Ackermann, John G. Block, Jeannot Hostmann, Isaac Meyer, Jersey City; Oscar R. Brugier, Rudolph Darnstadt, Adolph G. Massman, Newark; Theodore Diehl, Phillipsburg; Frederick M. Egger, John J. McLaughlin, George C. Webber, Elizabeth; Frank Fulton, Plainfield; Herman Hasler, Caldwell; Frank W. Heyward, Hackettstown; Bloomfield Hulick, Asbury Park; Thos. LeClear, Lyndhurst; Theodore E. Van Stone, Hackensack.

## NEW YORK STATE.

Harry E. Barnes, Herkimer; Howard R. Barnes, Robert W. Graham, Howard H. Hagen, Middletown; Fred C. Buckmaster, Barthelmy G. Donzel, Yonkers; Merton J. Coats, Edmeston; James M. Dickson, Boria Centre; Louis DeBois, Frank W. Trowbridge, Catskill; Frederick Hoyt, Goshen; Geo. H. Hummel, Long Island City; Frank R. Jennings, Grandin Norcross, Far Rockaway; Joseph M. Kraft, Newburg; Milton J. Lockwood, Stapleton; James M. McCullough, White Plains; Wm. H. McGraw, Cortland; Wm. H. McKenna, Malone; Victor S. Pier, Poughkeepsie; Charles L. Pierce, Fort Jervis; Charles F. Reynolds, Roxbury; William L. Sackett, Tarrytown; Robert J. Salicrup, Bath Beach; C. Wesley Smith, Shelter Island Heights; Chas. Wetmore Smith, Cornwallville; Wm. W. Smith, Norwood; Sewell Thornhill, Wappinger's Falls; Herbert C. Van Buskirk, Saugerties; Charles P. Gould, Seneca Falls.

## OHIO.

James A. Herlithy, Chillicothe.

## PENNSYLVANIA.

Henry Brown, John P. Donahoe, Scranton; Lester C. Gillette, Towanda; Guy H. McCoy, Smithport; C. Lewis Stephens, Marcus.

## RHODE ISLAND.

Frank H. Finley, Providence.

## SWITZERLAND.

William G. Austen, Lucerne.

President Fairchild then conferred the degree of Graduate in Pharmacy. In conferring the degree President Fairchild inadvertently limited it to the "gentlemen Graduates of Pharmacy," but he rectified this shortly afterward by conferring the degree separately on the two lady graduates. A departure from the programme was made here by postponing the ceremony of conferring the doctor of pharmacy degree until after

the prize for highest proficiency in practical pharmacy. This was won by Miss Julie M. La Wall, who seemed hardly to know whether to feel complimented or not at the remarks of Professor Coblenz in presenting the prize. Miss La Wall was one of the youngest looking persons on the stage, and could not have left her teens behind her more than two or three years. Yet Dr. Coblenz gravely assured the audience that to win a prize of this kind required *many years of long patient practice* and an intimate acquaintance with the practical work of a pharmacy, all of which was quietly endured by Miss La Wall with no other evidence of dissent beyond a pretty pout or two and embarrassed blushing. The prize was a crisp \$100 bill, and Miss La Wall's percentage was 68.

Thos. Le Clear of Lindhurst, N. Y., won the \$100 prize in practical chemistry with a percentage of 100. The \$100 prize for the highest proficiency in materia medica and pharmacology went to Karl M. Vogel, whose percentage was 84.

The faculty special prize of an analytical balance for the graduate showing the most proficiency and advance in the general study of pharmacy was awarded to Harry B. Ferguson of Little Falls, N. Y.

The awarding of the alumni prizes by retiring President Stover of the Alumni Association practically terminated the proceedings. The prizes, consisting of a gold, a silver and a bronze medal, were awarded to the three first men on the roll of honor, viz.: Kark Schnackenberg, Merton J. Coats and Kark M. Vogel.

#### Alumni Day.

"Alumni Day" was celebrated by the members of the Alumni Association of the College in a fitting manner, Wednesday, May 6, by a reception and musical entertainment, which was followed by the annual meeting, the twenty-sixth since the organization of the association. The reception and entertainment took place in the main lecture hall, the professor's rostrum being fitted up as a stage for the occasion. Several professional artists lent their services, and the programme was filled out by members and students and the secretary of the college. Hieronymus A. Herold was chairman of the Committee of Arrangements and introduced the entertainers. Secretary Mason, who is an honorary member of the Alumni Association, sang several songs. He was accompanied by his daughter, Miss Marjorie. His renditions were loudly encored. A number of select readings were rendered by B. Russell Throckmorton, which were received with much applause. Rudolph Gies, newly graduated Doctor of Pharmacy, sang with fine effect and responded to an encore. He was followed by Emile A. Bischof of the class of '89 in a baritone solo. Other features of the entertainment consisted of recitations by Miss Nellie Gaffney and fancy dancing by "little Lottie Lynch." During the intermission the audience was addressed by Dr. Diekman, who read the junior roll of honor and explained the methods adopted by the committee in the awarding of prizes to the junior class. The roll of honor usually consists of 13 members, but the number was increased by one this year on account of a tie. The total number of possible marks was 770 and the following are the students who approached nearest to this number in their order, constituting

#### THE JUNIOR ROLL OF HONOR.

Emil Trostler, 789½; John Glassford, 727; Henry C. Becker, 726; Wm. H. Rogers, Jr., 720; Julius Schulze, 719; F. J. Hubbard, 711½; W. H. Roberts, 711; Frank W. Rutherford, 708; Miss Lillian Henak, 708¼; A. Luderud, 701; H. J. McKellar, 699; R. M. Smith, 697; George Ferdinand, 687; George F. Peterson, 687.

The presentation of the Alumni prizes by President Stover followed. The prizes consisted of a metal still, a U. S. Dispensatory and a copy of Fluckiger and Hanbury's "Pharmacographia." The awarding of the still to Emil Trostler afforded Mr. Stover an opportunity to refer to the unsuccessful efforts re-

sented, after which came the election of officers to serve during the ensuing year. For president, Mr. Grazer placed in nomination the name of Arthur C. Searles. Mr. Searles is evidently a great favorite with the members, for the announcement of his name was greeted with hand clapping and cheers. Mr. Henning moved that the election be declared unanimous, which was done. The president-elect, on invitation of President Stover, addressed the meeting and thanked the members in a few well chosen words for the honor of election to the presidency. The election of officers to fill the remaining vacancies proceeded rapidly, the full list being as follows: President, Arthur C. Searles; vice-presi-



Officers of the N. Y. C. P. Alumni Association.

ADOLPH HENNING, Treasurer; ARTHUR C. SEARLES, President; A. HOBURG, JR., Secretary; KATHERINE C. MAHEGIN, Registrar.

cently made at Washington to repeal the free alcohol clause of the tariff act.

#### ANNUAL MEETING OF THE ALUMNI.

The twenty-sixth annual meeting of the Alumni Association was opened with an address by President Stover in which he reviewed the work of the past year and told of the progress of the association. He complimented Ex President Grazer on the results of his efforts to make the social features of the meetings the success they were, and alluded to him as an indefatigable worker in association affairs. The gains made by the *Alumni Journal* in the acquisition to its business management of Thos. M. Davies and of Alfred H. Mason as editor were pronounced, he said, and the association was to be complimented on the fact. Treasurer Henning submitted his annual report, which showed a net cash balance of \$1.87 and total assets of \$27.46. Reports of other committees were then pre-

sented, W. H. Ebbitt, Hieronymus A. Herold (vacancy to be filled); secretary, W. A. Hoburg, Jr. (re-elected); treasurer, Adolph Henning (re-elected); registrar, Miss Katharine C. Mahegin. Executive Board, Dr. George C. Diekman, Alfred Stover, Henry Kreuder. On motion of Mr. Grazer the entire graduating class of '96 were elected to membership in the Alumni Association, the names to be enrolled on payment of the annual dues. Before the meeting adjourned the members listened to a few remarks from Secretary Mason, the editor of the *Alumni Journal*, who expressed a wish to become personally acquainted with the reporters of the different classes. He explained that he had only accepted the editorship of the journal tentatively, and the amount of assistance he would get from the members during the next few months would decide whether he would be able to carry on the work permanently. This concluded the proceedings and the meeting adjourned.



### The Buffalo College.

The examinations at the Buffalo College of Pharmacy ended Friday, April 24. The faculty meeting was held Saturday, May 2, and the results were made known that night. The graduating class rehearsal was held Monday morning, May 4, at Music Hall, and the curators' examination Tuesday morning. This examination was very satisfactory.

The commencement exercises, Tuesday evening, at Music Hall, were largely attended. Following is a list of the graduates in pharmacy: Charles E. Abbott, Leon C. Bodine, John G. Brooks, Charles G. Herger, Archie A. Johnson, Percy A. Lyon, John A. Norton, William A. Palmer, Christopher C. Price, Alfred C. Skellie, Burt S. Stevens, Adelbert Valentine, Frank J. Blanton, George F. Biggs, Frederick J. Haist, Charles H. Jacobs, Alfred F. Kuhn, John G. Meidenbauer, M. D., William S. Owen, William J. Pauling, Henry Schick, Joseph E. Smith, Elester A. Swanson, George O. Willmarth, George A. Wood.

The following named students, lacking the age or length of experience required for graduation, are entitled to certificates of completed examinations: Oliver E. Dake, John H. Hilligass, Peter C. Klaasess, George M. Lathrop, Henry Maurer, Ernest F. Sumner, John B. Hegeman, Arthur F. Humbert, Edwin W. Lathbury, Clifford M. Libby, James P. Rooney, William F. White.

Taken altogether, the year's work has been very gratifying. The advanced course leading to the degree of Master of Pharmacy, organized last year, and the junior course, installed at the beginning of last session, have proved a success, and have met entirely the expectations of the faculty and students. Wednesday morning and afternoon the Alumni Association met, followed by their banquet in the evening.

### New Corporations.

The Swan-Parkes Mfg. Company, has been incorporated in New York City to manufacture lotions, salves, etc.; capital, \$20,000. Directors: W. D. Swan of Columbus, Ohio; Albert Parkes, A. L. Parkes, Jr., and Edward D. Edson of New York City.

The Dursleum Company of New York City to deal in drugs and patent medicines; capital, \$50,000. Directors: Edward Ellsworth and R. M. Ellsworth of New York City and W. Gordon Hill of Newark, N. J.

The Excelsior Drug Company is the name of a new Yorkville, S. C., enterprise, chartered by the Secretary of State to manufacture drugs and medicines for the wholesale trade. The capital stock of the company is \$5,000, divided into 100 shares of \$50 each. The incorporators are W. J. Waters, Sam M. Grist, John May and J. E. Lowry.

Following the receiver's sale of the drug stock of Hurlbut, Ward & Co., Des Moines, to John Heiland of Chicago, for \$80,000, as per order of court, a new company was formed and corporate articles filed, with \$150,000 capital stock. The officers of the new company are J. R. Hurlbut, president and director; C. H. Ward, vice-president and director; F. H. McArthur, treasurer and director; Milo W. Ward, secretary; John Heiland, director.

Central Pharmacy Company of Quincy,

Ill.; capital stock, \$8,000. Incorporators: Ceylon Smith, J. Y. Lewis and William S. Gille.

The J. N. Hurty Drug Company of Indianapolis; capital stock, \$4,000. The directors are J. N. Hurty, James M. Bentle and J. Richard Francia.

The Ph. Karcher Company has been incorporated at Newark, N. J., to manufacture and deal in chemicals, with the principal office at Cedar street, New York. The incorporators are Phillip H. Karcher, Wm. H. Mohrman and Hugo C. Hauser; capital, \$10,000.

## IN GREATER NEW YORK.

New York, Brooklyn, Jersey City and Vicinity.

Augustus C. Nehmann has opened a well appointed pharmacy at 125 Court street, Brooklyn.

H. W. Bronson's pharmacy, at Northport L. I., has been purchased by Thos. H. Botham.

Edwin Walker, of the Erie Specialty Company, Erie, Pa., spent a few days in New York last week.

Dr. R. B. Wilson, long established at 99 Park street, this city, died last week after a lingering illness.

Richard D. Young of the perfumery company bearing his name died in this city about two weeks ago.

The pharmacy of F. Kronsbert, at 105th street and Second avenue, has been purchased by Rudolph Martini.

Misking & Braunstein is the name of a firm which has opened a new pharmacy at 111 Varet street, Brooklyn.

George Eberhardt's pharmacy, at 2243 Eighth avenue, has been sold to C. F. Runkel of 878 Seventh avenue.

George B. Hastings, class of '97, N. Y., C. P., has accepted a position with Hermon H. Atwood, 846 Broadway.

J. Irving, Jr.'s, pharmacy, at New Brighton, S. I., has been repurchased by Patrick J. Dwyer, the former owner.

The pharmacy so long conducted by H. F. Goemann, at 1128 Park avenue, Hoboken, has been sold to A. G. Rohde.

Dr. George Essig has sold out his entire interest in the pharmacy at the corner of Bedford and Division avenues, Brooklyn.

Harry Sommerville has been appointed manager of the Old Dungs pharmacy, now owned by W. R. Scudder of Newark.

Max N. Wornow has bought out A. Silverman's interest in the store corner of Blake avenue and East Broadway, Brooklyn.

Fred. L. Flick, class of '95, N. Y. C. P., is a recent acquisition to the staff of S. Nauheim, corner of Fifty ninth street and Lexington avenue.

A. Lange, a well known Jersey City Heights pharmacist, formerly of 291 Central avenue, has moved to 878 Boulevard, Jersey City.

The pharmacy of W. A. Vogel, at Norwalk, Conn., has been purchased by Wm. C. Baur, formerly with C. O. Bigelow, 102 Sixth avenue.

Diedel & Son, corner of Third avenue and Twenty-seventh street, have secured the services of Carl A. Meisner, N. Y. C. P. '94, as prescription clerk.

Paul Luck, formerly with Robert Bracker, 905 Eighth avenue, has succeeded August C. Geist as clerk at

Kremb's Pharmacy, at 1225 Madison avenue.

Clay & Spencer, the well-known manufacturing perfumers of 1704 Race street, Philadelphia, have opened a New York office in the Downing Building, 106 Fulton street.

Wm. P. M. DeCamp returned from his Canadian trip the other day and is about to take a trip through the Northwestern section of the country for Whitall, Tatum & Co.

Among the passengers on the "Aller" for Europe last week was Louis Dohme of Sharp & Dohme. He was accompanied by two of his nieces, the daughters of Charles Dohme.

Grant J. Woolston, class of '90, N. Y. C. P., formerly with H. M. Boardman at 1588 Fulton street, Brooklyn, has taken a similar position with Livingston & Wenzel, 884 Broadway, Brooklyn.

Arthur Dubois, N. Y. C. P. '90, who has charge of one of the leading pharmacies in St. Domingo, was a visitor to New York last week. He is on his way to Paris, where he will spend his vacation.

Thomas O. Morrison, 262 Eighth avenue, this city, died last week. He had been secretary of the local branch of the Interstate Retail Druggists' League from the date of its organization up to the time he died.

E. E. Saunders, an old time pharmacist, has taken to the road as salesman for the Owl Cigar Company, and will shortly visit his old friends along the seacoast of New Jersey, Brooklyn and New York.

The death is announced of A. Ebner, proprietor of the pharmacy at 815 Leonard street, Brooklyn. He was a graduate of a German university and was 40 years old. The business will be continued by his widow.

A number of well-known drug men have decided to spend the summer months in Europe. Among others who have secured passage are: E. Marchi, Geo. Luders, Henry Tetlow, W. P. Nugerer, A. C. Brown and Hermann Tappen.

J. A. Heatherington, who has for a number of years conducted the pharmacy at 4 Vanderbilt avenue, this city, has secured possession of the corner store facing East Forty-second street and will convert it into a first-class pharmacy.

F. E. Roen's drug store, 521 Sixth avenue, was visited by an opium fiend a few days ago, who demanded a supply of his favorite drug. He was refused and had a row with the clerk. Between them they smashed a showcase and some bottles of cologne.

A new building is being erected at Amityville, L. I., to accommodate the

increasing business of James B. Henry, the well known pharmacist of that place. The pharmacy proper will be fitted up in white and gold and be ready for occupancy about June 1.

The office of the Winslow Pharmaceutical Laboratories has been removed from 96 Maiden lane to 19 Beekman street, and the business will now be merged in with that of the W. F. Kidder Company. A. S. Winslow has retired from the business.

On April 18 the fortieth anniversary of the founding of the house of Wm. R. Warner & Co., Philadelphia, was celebrated at the New York office by the presentation to Mr. Warner of a beautiful gold watch and fob. The watch bore a suitable inscription.

Albert Plant of Lehn & Fink was notified at the commencement exercises of the college last week. It had been his intention to spend a week in the Adirondacks, but illness in his family prevented the carrying out of his plans and he remained in the city.

Percy C. Magnus of McKenzie Bros. & Hills, the well-known essential oil distillers, has returned to the city after a four weeks' absence in the West and Northwest. One of the results of his trip is the opening of a Chicago branch at 161 Randolph street.

John Molloy, so many years connected with the firm of McKesson & Robbins, has suffered a sad affliction in the death of his wife, who passed away in this city May 1 at the early age of 84. Besides her husband she is survived by two children, a girl of 18 years and a boy of 7.

Thos. W. Shute, the proprietor of a pharmacy at Mamaroneck, N. Y., died last week from the effect of an overdose of morphine. He will be remembered by a number of city druggists as the former partner of W. H. McNair in the store at 226 Ninth avenue. He sold out in 1888, to purchase the store of C. S. Abrams, at Mamaroneck.

Wm. F. Richter, who is the owner of a paying pharmacy at Marion street and Ralph avenue, Brooklyn, is about to open a branch at the corner of McDougall street and Southwick avenue, Brooklyn. He has conducted his present store for a number of years with considerable success and is the manufacturer of a meritorious preparation of toothache wax, which sells under the name of Dent Cera.

The Board of Charities of this city has in hand an investigation to ascertain what has become of the large quantities of drugs and medical supplies which were dispensed last year from the general drug department at Bellevue Hospital to the other institutions under the board's care. The amount of drugs drawn for Blackwell's Island has exceeded the actual requirement, and the inquiry is to determine whether the drugs have been wasted or stolen.

Private dispatches, which were received in this city several days ago, gave the information that a serious accident had happened to Charles Pfizer, Jr., the junior member of the chemical firm of George Pfizer & Co., at 81 Maiden lane. Mr. Pfizer went to Europe three months ago on a trip in which business and pleasure were combined. On the day before he expected to leave London to return to this city he was out riding, and was thrown from his horse. Mr. Pfizer re-

ceived a serious concussion of the brain, but after his removal to his hotel he was reported to be recovering.

On May 1 the retail drug business so long successfully conducted by L. Rockefeller in Englewood, N. J., was purchased by a stock company incorporated as L. Rockefeller Company. The incorporators are L. Rockefeller, Harold Allen and William L. Blauvel. Mr. Allen will be remembered by many of his friends in this city as one of the charter members of the New York Society of Apothecaries and an inventor of some note. His automatic powder divider, a description of which appeared originally in the AMERICAN DRUGGIST for April 10, 1895, is figured in the last volume of the proceedings of the American Pharmaceutical Association.

Schiffelin & Co. of this city had an interesting exhibit of cocaine at Atlanta last week in connection with the meeting of the American Medical Association. The beautiful crystalline structure of the alkaloid was shown to great advantage in the shallow glass basin in which the crystals had been grown. An artist could have devised nothing prettier. The alkaloid had crystallized in handsome tufts and clusters of beautiful prismatic needles, long and radiating, while the hydrochloride was composed of unusually large crystals spread over the inner surface of an inverted glass saucer. The exhibit attracted considerable attention from the medical men in attendance.

The final meeting of the session of the New York Section of the Society of Chemical Industry will be held at the College of Pharmacy, 115 West Sixty-eighth street, on Monday evening, May 18.

Dr. G. Duisberg, director of the Farbenfabriken vorm. Friedr. Bayer & Co. of Elberfeld; Dr. C. Kolbe, Chemische Fabrik von Heyden, Radebeul-Dresden, and other foreign visitors, will be present. The following papers will be read: G. Duisberg, "The Education of Chemists;" Geo. W. Thompson, "On the Analysis of White Paints;" Frederick P. Dewey, "Accuracy in Assaying;" F. L. Slocum, "Estimation and Valuation of American Coal for Various Purposes."

H. S. Rickard, secretary of the G. F. Harvey Company, manufacturing chemists, Saratoga, N. Y., was married on Wednesday, April 22, to Miss Jane Spencer of Whitehall, New York. The ceremony took place in Trinity Church, Whitehall, and was the social event of the season in that pretty village. The church was crowded with the friends of the happy couple from New York, Albany, Saratoga, Syracuse, Ithaca and other cities. After a reception at the home of the bride, Mr. and Mrs. Rickard started for Old Point Comfort, where they will pass a honeymoon previous to settling down in a home of their own in Saratoga, which, fully equipped, was a present from the groom's parents.

#### Pinaud versus Hecht.

Judge Lacombe of the United States Circuit Court has granted an order restraining Myer Hecht from using the name of Ed. Pinaud of Paris on the labels or necks of his bottles in such a manner as to mislead the public into the supposition that the goods are of Pinaud's make. Judge Lacombe characterizes the use of Pinaud's name by Hecht and the general dress of his goods as a fraud on the public and the complainant.

#### Recent Removals.

Among removals of business quarters in the drug trade are: Merck & Co. to 9 University place; Geo. Wasson to 20 Platt street; Billings, Clapp & Co. to 16 Platt street; Coffin, Reddington & Co. to 80 Cliff street, and A. Stubbs to 99 Maiden lane.

#### Drug Trade Bowlers Dine.

The annual dinner of the Wholesale Drug Trade Bowling Club was one of the most successful and enjoyable affairs ever participated in by the wholesale trade of New York. The dinner was served in the main dining hall of the Down Town Association, at 60 Pine street, the use of the building having been secured through the courtesy of Francis Sloan of Dodge & Olcott and Edward Kemp of Lannam & Kemp who are members of both the bowling club and the association. After partaking of an elaborate dinner, served in most excellent style, Geo. M. Olcott, as toastmaster, called the members to order and happily and effectively introduced the speakers successively as follows: Jno. Clay, H. F. Ketcham, Thos. F. Main, George J. Seabury, Caswell A. Mayo and Alfred Hy. Mason. The intervals between the speeches were filled out with music, recitations, etc., by professionals.

#### American Chemical Society.

##### MEETING OF THE NEW YORK SECTION.

The regular monthly meeting of the New York section of the American Chemical Society was held on Friday evening, May 8, in the chemical lecture room of the College of the City of New York. Dr. Peter Townsend Austen, the chairman of the section, presided, and Prof. McMurtrie recorded for Dr. Woodman, who was unable to be present.

Dr. Austen made a report of the work which has already been accomplished by the committee in charge of the organization of the new Chemical Club. The membership of this club, he explained, was intended to include not only chemists, but also all such manufacturers and others who are directly interested in chemical progress and work. A place would thus be supplied where the chemist and the manufacturer could meet, become acquainted and exchange ideas. The committee will soon issue a leaflet giving a prospectus of the new organization, and this will be distributed to all those who are deemed likely to become members. Dr. Brenneman supplemented this report by saying that from the replies he had received to the inquiries he had sent out in regard to obtaining promises of membership, at least 60 could be surely counted on to join as charter members. The initiation fee of this new organization will probably be \$25 and the annual dues \$50.

Bacteria in milk sugar was the subject of a brief paper by Albert R. Leeds. He said that the milk sugar he had obtained from drug stores contained a ferment, which showed its workings if this substance was allowed to remain in the atmosphere for some time. He then went on to say that lactose could be broken down by mechanical methods, but slight transformations of the H and HO. To verify this he took hydrated oxide of zinc, and to avoid all contact with glass used a platinum vessel. This was digested for a long time at a temperature higher than the boiling point of

water in contact with lactose. After exhaustive washings a crystalline substance was found. Under microscopic examination, prismatic crystals which are colorless and transparent were easily made out. He used a microscope which enlarged 400 diameters, but said that one of less power would have served to reveal the crystals. In closing he said that these results should not be taken as conclusive, as he made use of animal charcoal, which may not have been entirely free from foreign substances.

"The Composition and Analysis of Milk" was the title of a paper by Prof. Harvey M. Wiley of Washington. He was, however, unable to be present and Professor McMurtre read this paper. Something was told of the theories of some foreign investigators, and then he said that many attempts were being made to make a substitute for mother's milk. In woman's milk the fat is less than in cow's milk and the ash greater. He then gave this as an average of results which he had obtained in analysis of woman's milk:

Proteids.....	1.52
Fat.....	3.28
Sugar.....	6.50
Ash.....	0.37
Citric acid.....	0.05
Undetermined.....	0.78
Total dry substances.....	12.40

Cow's milk does not contain the same nitrogenous substances as woman's and so cannot give the same food to the infant. The analyses in which the proteids are calculated as total N are not correct. It may be generally said that decomposition is due to bacteria. Recently, however, it has been shown that milk from healthy cows will spontaneously change. Milk which has been sterilized at high temperature is not milk in physiological terms. Woman's milk differs from cow's in containing neither casein or casein bodies, and also in having but one third of the phosphate.

Boiling of cow's milk cannot make it like woman's. He then went on to say that milk can be boiled and curdled without showing acidity. If milk contains autogenous germs it would be necessary to change a common view which is now held in regard to this subject. He then contended that milk for butter and cheese should be paid for according to the weight of fat which it yielded. Dealers hold that the milk from any healthy cow should be legally sold. Three per cent is a low limit to be placed on the amount of fat which should be produced. The milk of 75 cows which he examined averaged 8.65 per cent. fat, and of these only 12 fell below 8 per cent. A well kept cow should yield over 8½ per cent. Dairy men in Washington are compelled to procure licenses. Recently prosecutions have been successfully carried on against those dealers who sold milk in which fat was under the 3 per cent. limit.

Dr. Leeds disagreed with many of Dr. Wiley's statements, which he thought did not agree with those usually accepted by the chemists. Dr. Eccles said that it was decided 25 years ago that milk was sterile when secreted. He suggested that it seemed unjust to exclude milk with less than 3 per cent. of fat in it from the market and thought that milk which fell below this limit might be sold as an inferior milk.

Dr. Doremus then read the results of different people's analyses of mother's milk, which varied greatly in the percentage of fat contained.

Marston Bogert read a paper on "Normal Heptyl Sulfo cyanid," in which he narrated researches and discoveries which were being made by him in the Columbia College laboratory.

Dr. Austen exhibited a generator for the heavier gases, which he had made for him in Germany and which he frequently uses while giving popular lectures. The proceedings then terminated.

## NEW YORK STATE

BUFFALO, May 6.—The druggists of Buffalo continue to feel dissatisfied with the Raines law. They feel that the Legislature has practically granted them nothing at all, as a \$50 license permitting them to sell only on prescription is worse than no license. The feeling is universal that some concessions should have been granted them instead of making them pay more in proportion for their licenses than the regular liquor dealers. They are awaiting with interest the decision of the Court of Appeals on the validity of the law.

### THE OUT-RATE PROBLEM.

Feeling is strong not alone on this point, which so materially affects their profits, but on the evil of cutting rates. In regard to this evil they feel the jobbers are in large measure responsible, as instead of selling to cutters they should stand by the pharmacist, and devise some means by which prices can be maintained at more uniform rates, enabling all to make a reasonable profit. Certain druggists think the jobbers might meet this difficulty and stop cut rate selling by selling goods at retail prices, giving a rebate certificate to be repaid at a special time, the retailer certifying over his signature that he has not sold or advertised goods at less than schedule rates. The harm done by department stores cutting into every druggist's business can be undone only by concerted action, taken not alone by druggists, but by all firms selling goods that are sold in department stores. It has been suggested that one way out of the difficulty is for the druggists to refuse to handle goods on which there is no profit, and some unhesitatingly do this. They also think that a few of the manufacturers have made a mistake in raising the price of retail goods.

The Buffalo Druggist will not be suspended or go into new hands, the editor, Andrew M. Clark, having made satisfactory arrangements for its continuance.

Professor Hill, professor of chemistry at the Buffalo College of Pharmacy and city chemist, who has been ill for the past six weeks with inflammatory rheumatism, has fully recovered.

W. S. O'Brian, the West Eagle street druggist, expected to open his fine new store in the Ellicott Square building by May 1, but has been unavoidably delayed for a few days. He has secured as manager of the new store, Frank Goler, son of Major Goler of the late firm of Curran & Goler of Rochester, a young man well equipped by nature, education and experience for the responsible position he will occupy.

### THE ANNUAL MEETING.

A circular has been issued by the Erie County Pharmaceutical Association of Buffalo to the members of the N. Y. S. A., urging every member to be present at the annual meeting, to be held in Buffalo, June 28 to 26, inclusive. A most

attractive programme has been arranged by the committee having the matter in charge, which will prove a strong inducement to many to be present. Their presence is also urgently desired on account of the need existing for united effort in protecting their business interests, and it is hoped much good may be accomplished. The programme, as mapped out, is as follows:

Tuesday, June 23.—Reception, music and refreshments, at Genesee Hotel, in the evening.

Wednesday, June 24.—Carriage drive through principal avenues and our beautiful parks.

Thursday, June 25.—Grand excursion by steamer down Niagara River, to Chipewawa, Canada, thence by trolley cars to Lewiston. Crossing the river by ferry, the return trip will be made by "Niagara Gorge route," on the American side, to Niagara Falls, where a banquet will be served at the International Hotel, followed by an informal hop in the evening, the return to Buffalo being made by special train.

Friday, June 26.—Principal points of interest will be visited, which will include some of the finest buildings in our city.

Rooms may be secured in advance at the Genesee Hotel and at the Tift House, at \$2.50 per day.

Further information may be obtained by addressing the secretary, Plin. S. McArthur.

### Stray Notes.

Chas. H. Horseman will resume the management of Horseman Pharmacy, Schenectady.

John C. B. Gilmour, for a number of years manager of Horseman's Pharmacy, Schenectady, N. Y., has purchased the Edward Rosa Pharmacy of that city.

Frank A. Lawyer, formerly with Voo-winkle & Co., Oswego, has opened a very pretty and complete prescription drug store. He has an Art Tile fountain. Mr. Lawyer has been a popular drug clerk for a number of years in Oswego, and will, no doubt, meet with success in his new enterprise.

George E. Thorpe, of the firm of Thorpe Brothers, pharmacists of Hoosick Falls, has purchased the Fox & Dygert pharmacy of this city, and has taken possession. He has dissolved partnership with his brother, and will remove the stock of his store in Hoosick Falls to this city. He has purchased one of the finest stores in the city. It is located in the new Yates Hotel, and is known as the Yates pharmacy. Fox & Dygert have as yet made no plans for the future.

## MASSACHUSETTS.

### Licenses in Massachusetts.

BOSTON, May 4, 1896.—More than 1,200 persons in Fitchburg signed a remonstrance against the issuance of liquor licenses to druggists in that city. At a hearing which was granted by the City Council only a few persons appeared, it being an easier matter to get them to sign a paper than to be present at a public gathering in the interest of the same matter. The Mayor is a druggist, but has not made application for a license. The petition in part said:

"Cases of emergency and extreme necessity demanding the use of stimulants are so infrequent here as to make the

General granting of licenses unnecessary. In ordinary emergencies the article is procurable, even though druggists are forbidden the right to sell intoxicants. While there may be occasions where the privilege of purchasing might prove a blessing in our community, the prohibition may prove a vastly greater boon to larger numbers." Notwithstanding the hearing and the petition, the following named were granted licenses of the sixth class: F. H. Fenwick, J. P. Derby, E. A. Sawyer, A. H. Burgess, D. H. Joel, H. A. Estabrook, H. G. Greene, A. W. Fairbanks, W. D. Johnson & Co. and F. S. Stone. The vote of the Aldermen was four to two in each case.

It has been decided by the License Commissioners of Waltham to allow the licensing of druggists to wait until June 1, when the power will revert to the Board of Aldermen. Two years ago, when the city voted no license, two special licenses were granted to druggists and the plan gave great satisfaction. As the matter stands now no druggist in Waltham can legally compound a prescription calling for the use of liquor.

All the druggists of Watertown have made application to the Selectmen, but the story has got around town that only two will get licenses. Not all the druggists have received certificates from the State Board of Pharmacy, but that little formality did not stand in the way of every one getting in on the ground floor first. One of the members of the board is bitterly opposed to liquor licenses and it is possible that all applications may be tabled.

There is much discussion in Somerville over the prospect of the druggists of that city receiving licenses of the sixth class the coming month. For three years there have been no licenses for the sale of liquor in Somerville, the City Council having refused. It is the opinion among the 20 or more druggists that the applications will receive the same fate this year, and that it is about useless to file them with the board. The City Council this year is divided equally on the question, and the License Committee is opposed. Therefore, the outlook is not favorable.

Licenses of the sixth class have been granted in Springfield to the following named druggists: Charles P. Alden, Walter W. Bradbury, James L. Bugbee, I. R. Barker, W. H. Blake, W. P. Elton, Fred. A. Eldred, Daniel F. Keefe, E. F. Leonard, T. Edward Masters, C. C. Merritt, W. A. Prince, Charles V. Ryan, W. L. Sadler, Arthur E. Webber, Fred. N. Wheeler.

Last year two of the druggists in Amesbury were granted licenses to sell liquor. It has been generally believed that the same plan would be adopted this year by the Selectmen, but it is stated that the board has decided not to grant any. This may be so, but some pressure may be brought to bear upon them to reconsider the vote and issue at least one.

Licenses of the sixth class have been awarded to 34 druggists in Lowell. The commissioners made a thorough examination into the character and standing of every applicant. The number of druggists in that city who sell liquor is now much smaller than before the license commission was formed.

All the druggists in Haverhill who applied for licenses to sell intoxicating liquors under the sixth class license have received them.

The license commissioners of Salem have voted to receive no applications

from the druggists of that city for sixth-class licenses. What action the druggists will take is not known, but it is understood that they will apply to the Aldermen.

## PENNSYLVANIA.

### Getting Ready for the Meeting of the N. W. D. A.

PHILADELPHIA, May 6.—Although the annual meeting of the N. W. D. Association does not come off until October, preparations looking to the entertainment of the representatives who will attend the meeting are actively under way, and a few days ago Mr. McIlvaine, chairman of the Committee on Entertainment of the Philadelphia Drug Exchange, sent out invitations to a number of the most prominent druggists here to meet and take some action in regard to the manner the visitors are to be entertained. After a talk upon the subject funds were promised by those present, and the committee were instructed to go ahead and make suitable arrangements. While it has not been definitely decided as to where the meeting will be held, it is thought that it will take place in the Hotel Walton, as it is deemed advisable to have it at such a place, within easy reach of the hotels at which the visitors will assemble. At first it was the intention to hold it in the Bourse Building, but as this is considered too far down town, it is likely that it will be held at the first named place.

### THE MEETING OF THE STATE ASSOCIATION.

Owing to the lack of accommodations at Gettysburg, the annual meeting of the Pennsylvania Pharmaceutical Association will not be held at that place, and it has been decided to hold it at Mt. Holly Springs, on June 16. The Committee on Entertainment are endeavoring to make this meeting a very attractive one, and they have gotten up a very interesting programme, which consists of a football match, lawn tennis game, baseball, and a mock examination by the Pharmacy Board. It is also understood that French, Cave & Co. will distribute large quantities of their perfumes.

### THE POSITION OF VANILLA BEANS.

Vanilla bean prices, according to an interview with Charles E. Hires, recently, are steadily advancing, as has been the case these past six months, and to all appearances they will continue to come high, as the crop has been cornered. It is thought, however, that in the fall there will be a break and prices will again become normal. The growers of these beans, who are noted as a rule for their veracity, state that this year's crop will not amount to more than 200 or 300 cases, when a normal crop is about 1,000 to 1,200. It is said that large buyers have bought up the crop and have secured a large amount of the stock on hand. It is thought, however, that the crop will be larger than estimated by the Mexican growers. Mr. Hires has opened his store on Chestnut street, near Eleventh, for the sale of his root beer. This location has been an advantageous one for the sale and advertisement of this root beer, and during the hot weather it keeps the clerks in the store busy supplying the wants of the throat-parched pedestrians. Owing to the high duty placed upon all

beverage compounds by the Canadian Government, the Charles E. Hires Company were compelled to manufacture their root beer in the Dominion. This they have now done, and it is thought that they have enough stock on hand to last the season; whether they have or not, the factory has been closed for the time being. This company have also a fine exhibit in the new Bourse Building. They have a room which is handsomely decorated and in which a fine display of their goods is made.

### General News.

Charles M. Edwards has returned from a trip to Louisville, Cincinnati and Pittsburgh, and he has had a very successful tour.

Harry Cushing, formerly clerk for E. R. Gatchel, Tenth and Spring Garden streets, and later at Eleventh and Somerset streets, died recently at Mahanoy City.

Theodore Campbell, Fifteenth and South streets, has opened another store at Overbrook, Pa. This store he has handsomely fitted up, and it is one of the features of that section.

Dr. W. H. Galbraith, who formerly conducted the drug store at Ninth and Spring Garden streets, has bought out Mr. Davis' drug store, 5189 Germantown avenue, Germantown.

At a meeting of the creditors of George D. Wetherill & Co., held recently, a proposition, it is said, was made to the creditors to accept 50 cents on the dollar, one-fifth of which was to be in cash and four-fifths in unsecured notes.

D. J. Widener has bought the drug store formerly conducted by Sydney L. Knissel at Twelfth and Jefferson streets. Mr. Widener is making a number of alterations to the store, and pending these changes it is closed. He was formerly at Germantown avenue and Jefferson street.

Wm. F. Speakman, who for many years was the manager of the drug department of Bullock & Crenshaw, and who resigned that position the middle of last month, is now in Europe. He will be gone a couple of years, and in that time will visit many of the prominent places of the old world.

On April 23 Caleb R. Keeney celebrated the golden anniversary of his store at the corner of Sixteenth and Arch streets. It is seldom that a business is established and carried on for 50 consecutive years at one location, and the event was made much of by Mr. Keeney and his friends. Some years ago Mr. Keeney's son became associated with his father, and by his aid and effort the business has increased and prospered.

On April 27, at the Philadelphia Bourse, a celebration began and lasted throughout the week. It was called Manufacturers' Week, and many of the leading wholesale drug houses and those who supply druggists with goods had prominent displays. Hance Bros. & White had an exhibition of their goods which was very artistically arranged. William B. Burk & Co. exhibited sponges and chamois, and it was one of the features of the exhibition. There were other exhibits by many of the trade, but the two above mentioned were the most prominent displays.

## OHIO.

## Death of Dr. Spenser.

CLEVELAND, May 5.—Dr. Peter Ignatius Spenser, one of the oldest and best known pharmacist physicians in Cleveland, died at his home, 870 Central avenue, on April 27, of heart failure, from which he had been a sufferer since the war. Dr. Spenser was born in Germany in 1837, and came to this country during his sixteenth year. After a brief stay in New Jersey and in Pittsburgh he settled in Cleveland, since which time he has thoroughly demonstrated his worth as a citizen and his ability as a physician. Dr. Spenser studied pharmacy in this city, and was an intimate friend of such well known druggists of Cleveland's early days as Hugo Hensch and Col. Louis Smithnight.

## ALUMNI OF THE CLEVELAND SCHOOL OF PHARMACY.

The Cleveland School of Pharmacy has reached the stage at which it can confer degrees on graduates, and this year's graduating class, combined with past graduates, formed an alumni association at a meeting held last week. The following officers have been elected: Dr. D. B. Steuer, president; Eugene R. Selger, vice-president; Frank W. Rudenauer, financial secretary; Miss Louise Carroll, recording secretary, and Dr. Harrison Wagner, treasurer. The members of the faculty were elected to the association as honorary members. A constitution was presented and referred to proper committees.

## MICHIGAN.

DETROIT, MICH., May 2.—The Detroit Pharmacal Cigar Company, promises to be such a success that a number of Cleveland druggists have signified a desire to join it and the company will probably admit them.

R. J. Sawyer of Menominee, Mich., has put in one of the finest soda water outfits in western Michigan, it being a combination of onyx, silver, marble and cut glass, with handsome mahogany framed mirrors.

A lively law suit was recently held in a Detroit court, the litigants being Dr. Thomas S. Barclay and druggist William H. Burke. The doctor refused to pay a bill of \$10.94 for drugs, claiming that they were impure. The justice decided in favor of the druggist, and after the trial was over the doctor said he would have \$10 worth out of Burke before he was through with him, and Burke declared he would take it out of the doctor's skin if he said again that the drugs were impure. This exchange of compliments came nearly resulting in a personal encounter, but no blows were struck.

The Valley City Drug Company filed articles of association at Grand Rapids, Mich., last week. It is capitalized at \$4,000, divided into 500 shares, all of which is paid in. The stock is held as follows: F. W. Curtis, 150 shares; Charles J. Flynn, 50; Edith M. Curtiss, 150; Fred L. Baker, 70; Theodore Kennich, 80. The company is organized to manufacture and sell everything in the line of grocers' and druggists' supplies, pharmaceutical and proprietary medicines, wines, liquors, glassware, fancy goods, paints, oils, cigars, tobaccos, bicycles and bicycle supplies.

## The Chicago College of Pharmacy.

History of the College—Now in its Thirty-sixth Year—Its Professors Went to the Front During the War—Building Burned Down in the Chicago Fire—British Pharmacists Subscribed for a New Building—The College Now a Department of the University of Illinois—One Woman Graduate Receives Honorable Mention—List of the Prize Winners—Graduating Class of '96.

The Chicago College of Pharmacy was incorporated in 1859 by the retail druggists of the city for educational purposes, and was carried on by them successfully until the outbreak of the war, but was then abandoned owing to the professors being called to the front as brigade surgeons, and so many of the students enlisted in the service. At the close of the war the college was reopened and continued until the big fire in 1871, when it was burnt out entirely, the only remains being a part of a Parrish gas stove, which is now among the relics of the college, the loss being nearly \$15,000. Henry B. Brady, treasurer of the Pharmaceutical Society of Great Britain, having recently been visiting in this country, and attending a meeting of the American Pharmaceutical Association that was held in St. Louis during September of that year, was at the time of the fire on his return home. On reaching London he heard that the fire was still raging, and in conjunction with Professor John Attfield of the Pharmaceutical Society cabled to E. Ebert asking for particulars of the condition of the college after the fire. On receiving the reply that all was consumed, these gentlemen called a meeting and formed a committee, consisting of Messrs. Attfield, Brady and Ince to receive donations for the re-establishment of the college. Inside of one year the pharmacists of the world had contributed a library, apparatus, instruments and material with cash amounting to about \$21,000. This generous donation was received in time to inaugurate a course of lectures when this donation was received. Mr. George Buck, the president of the college, accepted it in the name of the retail druggists of the city of Chicago, with the pledge that it would be for all time sacredly used for educational purposes. It was found in a few years that the college had outgrown the premises occupied, and larger quarters were obtained. In 1888 the increased space was found to be inadequate and a permanent home was felt to be absolutely necessary, and the building that is now occupied by the college was erected for the purpose. The college up to this time had been doing the work that its founders had in view at the time of its inception.

After the passing of the pharmacy law by the State Legislature in 1881 it became apparent that as the law demanded educational requirements from those engaged in the practice of pharmacy, it seemed to the trustees of the college that it be the province of the State to furnish this education in its State University, and a move was made to transfer the college to the university, but on looking into the conditions of the charter of the State University, it was found that one of its requirements was that all of its departments should be located in Champaign County, Ill. The trustees of the Chicago College of Pharmacy did not feel that its usefulness would be maintained equally

as well in a county district as in a city and for that reason the project of affiliation was for the time being dropped. At the last session of the Illinois Legislature in 1895, this obstacle was removed and now the departments of law, medicine, dentistry and pharmacy can be located in the city of Chicago.

With this obstruction removed, negotiations were at once opened with the trustees of the State University by the trustees of the Chicago College of Pharmacy for the transfer of its property to the State University. This transfer, embodying all the property, real and personal, amounting to nearly \$80,000, is made to the State of Illinois without any other consideration than that the department of pharmacy of the university be carried on in the city of Chicago. This was made with the unanimous consent of the State University trustees at a meeting held on April 23, at Champaign, the Governor of the State being present, and favoring and approving of the object of the meeting.

The retail druggists of this city, who have taken an active interest in the welfare of the college, feel that the transfer to the State University will be of great benefit to the future druggists of the country, and they are justly entitled to great praise for the work they have done and for the money that they have spent.

The formal transfer will be made as soon as the legal papers can be drawn up.

## Commencement Exercises.

The fact that the college had become a department of the University of Illinois was announced at the commencement exercises of the College of Pharmacy, held in the Schiller Theater, April 23. When the exercises were opened A. E. Ebert made the announcement. Not even the professors of the College of Pharmacy who were present knew of the affiliation, and Mr. Ebert's words caused surprise. Hereafter the college will be known as the department of pharmacy of the University of Illinois.

At the commencement exercises Ellis Clyde Datin of Nauvoo, Ill., won the pharmacy medal. Dell Frank Riddell of Waverly, Neb., won the chemistry medal. The Biorth prize microscope was won by Louis I. Schreiner of Danville, Ill. Ellis Clyde Datin secured the alumni president's medal. Melville A. Farris of Bloomington, Ind., delivered the salutatory and Louis I. Schreiner was the valedictorian. Those who received honorable mention were: Miss Lucy Heine-mann, Chicago, who was the only woman graduate; Herman Hollander, Galena; Edward Stuart Patten, Charles F. W. Schultz and Clyde W. Townsend. Those who graduated are:

Pharmaceutical Chemist.—E. Fellows, Leando, Iowa; G. E. Kurtz, Paris, Ill.; R. J. Lanterbach, Gratiot, Wis.; D. F. Riddell, Waverly, Neb.; J. M. St. John, Carmi, Ill.

Graduates in Pharmacy.—H. G. Arnt,



Oconto, Wis.: O. Berglund, Lindsborg, Kan.; E. C. Datin, Nauvoo, Ill.; G. S. Ellis, Terre Haute, Ind.; H. L. Elich, Chicago; M. A. Farris, Bloomington, Ind.; S. T. Gillispie, Hiawatha, Kan.; C. V. Green, Chicago; Oliver Harstad, Sioux City, Iowa; R. S. Heck, McGregor, Iowa; Lucy Heinemann, Chicago; A. E. Herr, Chicago; Herman Hollander, Galena, Ill.; E. P. Hubbard, Chicago; J. F. Hummel, Grundy Center, Iowa; O. C. Koelle, Sioux City, Iowa; W. G. Krieter, Palatine, Ill.; L. S. J. Linden, Chicago; A. A. F. Lueck, Tomah, Wis.; C. R. Long, Howard Lake, Minn.; J. A. Mertes, Chicago; E. M. Moran, Michigan City, Ind.; E. S. Patten, Carbondale, Ill.; H. E. Rowe, Sheridan, Ill.; W. Schliukman, Quincy, Ill.; L. I. Schreiner, Danville, Ill.; C. F. W. Schultz, Columbus, Wis.; F. H. Schwertfeger, Muscatine, Iowa; Ashton Staman, St. Joe, Ind.; H. J. L. Steege, Dundee, Ill.; F. G. J. Stieber, Peoria, Ill.; C. W. Townsend, Vandalia, Mich.; G. C. Weinberger, Chicago; R. E. L. Williams, Morrillton, Ark.; T. Z. Xelowski, Chicago.

a supply of Tanglefoot fly paper adequate to the rapidly increasing demand for it both for domestic and for foreign consumption.

The P. D. Q. toothache pellets, made by the Kroh Chemical Company, Detroit, Mich., have many points of excellence to commend them to the drug trade. These points will be fully explained in a circular which the Kroh Chemical Company will gladly send, accompanied by free samples, to applicants mentioning the AMERICAN DRUGGIST.

### Passing of the H. W. Jayne Company.

A business change affecting the price of naphthalin and other coal tar products was consummated last week by the consolidation of the H. W. Jayne Chemical Company of Philadelphia with the Barrett Mfg Company. The business of the consolidated firms will be conducted under the name of the Barrett Mfg. Company at 950 Drexel Building

out into speculative buying. Prices in view of this are largely nominal on most crude Drugs, and no improvement in the prevailing condition of things is looked for until after the elections, the influence of Presidential year being felt in wholesale drug circles as keenly as in other lines of trade.

#### ADVANCED.

Alcohol,  
Opium,  
Bromides,  
Crude carbolic acid,  
Salicine,  
Balsam copaiba,  
Cinchonidine,  
Naphthaline,  
Cardamon seed,  
Gum arabic,  
Oil cardamom.

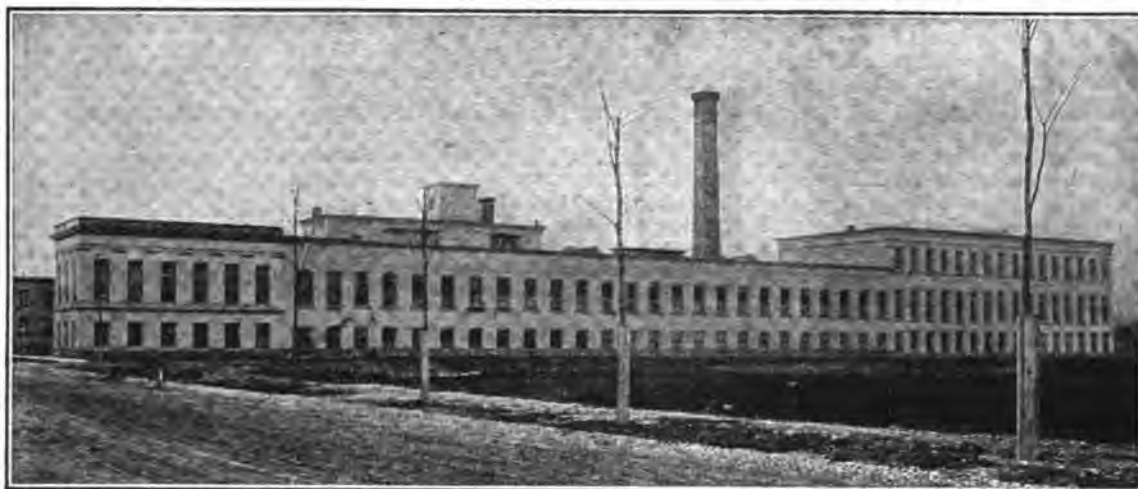
#### DECLINED.

Morphine,  
Cod liver oil,  
Menthol,  
Camphor,  
Milk sugar,  
Oil c tronella,  
Jamaica ginger.

#### DRUGS.

Alcohol has been advanced 1c. by the trust producers, and \$2.34 is now asked for lots of five barrels or more. Cologne spirit is also higher, and now quoted at \$2.40 in quantity lots.

Balsam Copaiba is firmer at a slight advance over previous quotations, with 40c. to 42c. asked for Para. True Central American is held at from 32c. to 37c.



WORKS OF THE O. & W. THUM COMPANY, AT GRAND RAPIDS, MICH.

### The Making of Fly Paper.

The entire building illustrated herewith, which is 325 feet long, and other smaller buildings, are used exclusively for making "Tanglefoot" fly paper. Hundreds of employees are busy every working day in the year—some in the box factory which makes nothing but Tanglefoot boxes; some in the case factory which makes nothing but Tanglefoot cases; some in buildings in which the crude raw materials are refined; some in the machine shop where all the new machines are built; some in the carpenter shop; some in the holder department; some in the paper department; some in the printing rooms; some in the packing rooms; some in the sticking rooms where many intricate machines are turning out hundreds of sheets per minute day in and day out; some in the laboratory, testing raw materials and experimenting with new compounds; some in the inspecting rooms examining the product before it is packed. All these are working systematically together, utilizing to the fullest extent the vast facilities of the O. & W. Thum Company of Grand Rapids, Mich., for turning out

### Reduction in Price of Saratoga Vichy.

The Saratoga Vichy Spring Company, Saratoga Springs, N. Y., have announced a reduction in the prices of their natural water to the following scale: Per case, 100 pints, \$10; 50 quarts, \$7.50; 48 pints, \$5.50; 24 quarts, \$4.

### Review of the Wholesale Market.

NEW YORK, May 9, 1896.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The volume of business in the several departments of Drugs, Dyestuffs and Chemicals continues of fair proportions, though a falling off is noticeable in quantity orders, the bulk of business being made up of small jobbing transactions. Dealers are pursuing the conservative policy of buying to meet current requirements only, and there seems to be a general indisposition on the part of both jobbers and consumers to branch

on actual sale, while 38c. is generally asked.

Balsam Fir, Canada, does not offer below \$2, with up to \$2.20 asked from jobbers; no sales of importance are reported.

Balsam Tolu offers from jobbers at 50c., though 45c. will buy in a large way. The demand at the moment is confined chiefly to jobbing parcels.

Balsam Peru continues weak and irregular even in the face of strong advices from the London market. Offers to sell in this market were made at \$1.85 to \$1.90 and lower, though \$2 to \$2.10 represents the popular quotation.

Cacao Butter continues held at 30c. to 31c., with only a limited inquiry at the moment and small sales. Prices at the last public auctions in London and Amsterdam were slightly lower, or, say, the equivalent of 29½c. at the former and 31¼c. at the latter.

Caffeine continues held and selling fairly at the previous range of \$5.50 to \$6. The net import cost is about \$5.85.

Carnauba Wax continues quoted in a large way at 38c. for No. 1, 26c. for No. 2 and 28c. for No. 3. But there is little

inquiry at the moment and business is dull.

*Cassia Buds* continue weak and irregular, with the tendency in buyers' favor. We quote the range at 17½c. to 18c., though these figure can be shaded in some instances on a firm bid.

*Chamomile Flowers*, crop of 1892, have sold during the interval down to 5c. to 6c., while goods not as ancient, yet entitled to the term "old," are firmly held at 9c. to 11c., as to quality. New goods on spot remain at about 12c. to 15c., according to quality.

*Cinchonidine* has been inquired for quite freely of late, and the small available supply being closely concentrated, prices have almost doubled in the interval. While 8c. to 4c. would buy a week or ten days ago, the article is now held quite firmly at 6c.

*Cod Liver Oil*, Norwegian, has weakened a trifle in the interval and prime stock can be purchased down to \$57. An advance on this quotation is asked for some specially favored brands. The tone of the market is strong, with every indication of an early advance on all brands. Last season's catch of fish was considerably below the average, and this, coupled with a poor yield of oil from thin livers, points to a scarcity which will be sure to send prices higher.

*Cubeb Berries* are rather neglected, and while our quotations represent the popular range, it is understood that as low as 8½c. to 9c. has been accepted for XX stemless.

*Guarana* remains more or less unsettled in price, with 55c. a common quotation and as low as 52c. named in some quarters.

*Juniper Berries* have sold fairly in the interval, a sale of some 80 bales being reported at 31¼c. A slight advance is asked for smaller parcels and the market is steady.

*Kola Nuts* are meeting with fair sale in fair sized lots at firm prices. The range quoted is from 10c. to 12c. for musty and from 15c. to 18c. for stock in good condition.

*Naphthaline* continues in active demand and the market shows a decidedly firmer tone, with prices at 2¾c. to 3c. for ball and 2¼c. to 2¾c. for flake, according to quantity.

*Lycopodium* is somewhat irregular and higher prices are anticipated. Sales are making at 48c. to 45c., which are regarded as close figures for Politz.

*Morphine* has been reduced in price by the leading manufacturers, acetate, muriate and sulphate being all 10c. lower. The revised figures are \$1.50 for bulk, \$1.55 for 1-oz. vials inclusive, \$1.75 for ½-oz. vials in 2½-oz. boxes and \$1.80 for ½-oz. vials in 1-oz. boxes, in lots of 25 oz. or more.

*Opium* has been marked up another notch since our last. The lowest quotation coming to our notice is \$2.07½, but we hear of no orders being filled at less than \$2.10. Broken lots are held firmly at \$2.10 and \$2.12½. Powdered opium is still quoted at \$2.75 and \$2.80 for ordinary quality and \$3 for high test.

*Salicine* has been advanced in the primary market 50c. a pound and the cost to import is now \$2.50 to \$2.75, according to quantity; \$2.75 to \$2.95 is asked for ordinary jobbing quantities.

*Saffron*, American, is in light demand;

quoted 84c. to 85c. Spanish is firmly held from \$6.50 to \$7.50 for Valencia and \$4.75 to \$5.25 for Alicante, according to brand.

*Senna Leaves* are without quotable change in price, but very firm and apparently tending higher. We quote the range from 17c. to 35c. for Alexandria, and 6c. to 14c. for Tinnivelly. Alexandria siftings were reported sold at 10c. and generally held from 11c. to 12c. at the close.

*Sugar of Milk* has been reduced in price about 1c. per lb. Powdered is now quoted from 12c. to 17c., according to brand.

#### DYESTUFFS.

*Aniline Salt* is rather neglected at the moment, but prices continue firm at the range of 13¼c. to 18½c., according to quantity and seller.

*Cutch* continues held and selling fairly at the range of 4¼c. to 5c. The demand is confined to small lots chiefly.

*Divi Divi* is in large spot supply and rather slow of sale, and holders are not disposed to urge the distribution by making price concessions.

*Gambier* meets with little inquiry and the market continues weak and irregular.

*Sumac* continues in moderate request with sales of Sicily at \$47 to \$50, and Virginia at \$37 to \$40.

#### CHEMICALS.

*Arsenic*, white, is a shade lower since our last, though holders still ask 6c. for English on spot, with as low as 5½c. named in a few instances, and sales of Continental at the inside figure were fairly numerous.

*Bleaching Powder* is in better demand and prices are firmly maintained at the contract range. Several sales are reported at \$1.50 to \$1.65.

*Bromine and Bromides* have been advanced about 8c. Bromine is now quoted at 48c. in lots of 100 lb. to 58c. in smaller quantities; Bromide Potassium at 42c. to 43c.; Bromide Sodium at 47c. to 48c. and Bromide Ammonium at 52c. to 53c.

*Chlorate of Potash* is in better supply and values are easy. We are reported sales of kegs from 9c. to 9½c. and 8¾c. to 8½c., as to quantity.

*Cream Tartar* continues in fair jobbing demand for prompt and forward delivery. Crystals are quoted at 26c., and powdered from 26c. to 26½c., less the usual discount as to quantity.

*Tartaric Acid* continues in fair jobbing demand at manufacturers prices, or say 38c. to 38¼c. for crystals, and 38½c. to 38¾c. for powdered. Rumors of quiet shading on these prices are plentiful, some outside lots being offered, it is said, at about ½c. below the regular quotations.

*Nitrate Soda* is under good control and prices are well maintained; sales of spot stock are reported at 1.68¼c. to 1.70c.

In other chemicals there is nothing new or interesting to report.

#### ESSENTIAL OILS.

*Anise* continues quiet, but holders are not urging sales below \$2.45 to \$2.50.

*Cassia* has not changed from \$1.85 to \$2, though the demand at the moment is very limited.

*Citronellu* is easier and values have declined in the interval, with supplies offering from 85c. to 87c.

*Clove* continues dull and quoted 45c. to 50c. for bud and 86c. to 88c. for stem.

*Cardamom* is scarce and firm and the quotation has been advanced to \$20 for original packages.

*Peppermint*, Wayne County, in tins is slightly firmer at \$1.85 to \$1.90. Western is held at \$1.65 to \$1.75 on spot with a fair business reported.

*Sassafras* continues in active demand, the artificial being given the preference and selling at 30c. to 35c.; true oil is quoted 40c. to 42c.; Saffrol is selling fairly at 40c.

*Wintergreen* continues in steady fair demand with sales of artificial at 60c. to 70c. and natural (birch) at \$1.25 to \$1.80.

#### GUMS.

*Aloes* remain in firm position, with lower prices than 8¼c. and 8½c. for Curacao and 6½c. to 6¾c. for Cape the exception. Most holders ask ¼c. over the outside figures for ordinary jobbing parcels.

*Arabics* continue to reflect an advancing tendency, with the import cost fully up to if not higher than local dealers' figures. First picked is very firmly maintained at 59c. to 60c., seconds to fifths are quoted from 87c. to 20c., and the latter figure seems to be about the average for sorts.

*Camphor* has marked a rather sensational decline. Following after the report of the death of Colonel North came a report of the collapse of the English camphor syndicate of which he was the head, and under the influence of this report values here dropped immediately. A decline of 6c. was announced May 4, and city refiners now offer barrels at 46c. and cases at 47c. Japanese refined was lowered to 46c. for 1 lb. and 2 lb. case and 50c. for 1 oz. blocks.

*Shellacs* continue in fair consuming demand without any special deviation in prices. D. C. quoted 30c.; V. S. O., 28c.; T. N., 28c. to 28¾c.

#### ROOTS.

*Dandelion* has been inquired for to some extent and numerous small sales are reported at 6½c. for German.

*Gentian* continues firm, with sales at 5½c.

*Ginger*, Jamaica, has sold fairly in the interval and prices are slightly firmer with 15c. to 18c. now asked for natural and 18c. to 20c. for bleached, as to quantity.

*Golden Seal* continues slow of sale at 20c. to 21c.

*Ipecac* continues in fair demand and the market is firm from \$1.85 to \$1.40.

*Jalap* continues dull, but holders are not urging supplies and the quotations remain 11c. to 12c.

*Senega* is maintained at 20c. to 21c. for Manitoba and 21c. to 22c. for Minnesota, but only small parcels are at present inquired for.

#### SEEDS.

*Coriander* meets with some inquiry and sales are reported at 3½c. to 4c. and 3c. to 3½c. for bleached and unbleached respectively.

*Mustard* has been in better demand and yellow is firmer at 2¾c. to 2½c.

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## PHARMACY LAW AND THE DEPARTMENT STORE.

THE Kings County Board of Pharmacy in particular, and the pharmacists of the United States in general, are to be congratulated that a wealthy and influential corporation, operating one of the largest department stores in the United States, that of ABRAHAM & STRAUS of Brooklyn, have been adjudged guilty of transgressing the pharmacy law. That the department stores have violated the pharmacy laws, not only in this State, but in nearly every State, is a notorious fact, and one which has given rise to much adverse criticism on the part of the pharmacists directed toward the Boards whose duty it is to enforce the law. In fact, the failure of the Boards to prosecute these frequently wealthy and influential corporations, has in some cases brought the entire law into disrepute, both with druggists who obeyed it and with small dealers, who, noting the immunity of the department stores, evaded it.

### A CASE WITHOUT PRECEDENT.

So far as we can recall at the moment, this is the first case in which the issue has been squarely joined between a Board of Pharmacy and a leading department store, and the Kings County Board of Pharmacy, which brought the charge, through the District Attorney's office, and which furnished the necessary evidence through its president, DONALD L. CAMERON, deserves the thanks of the entire drug trade for the energy with which it has pressed this charge in the face of adverse circumstances.

Our readers will readily recall the active campaign carried on by the Kings County (Brooklyn) Board of Pharmacy last February against the grocer-selling druggists of Brooklyn, and which resulted in the discontinuance of the promiscuous sale of drugs by the small grocers on the outskirts of the city. It was then that the first steps were taken looking toward the bringing of suit against ABRAHAM & STRAUS, as being a representative of the better class of department stores.

Under the Kings County law actions

for violation of the pharmacy act must be brought by the District Attorney, and the experience of Pharmacy Boards all over the country is that this office, as usually conducted, does not furnish the best means of prosecuting infringers of pharmacy law. In the face of this and of the fact that ABRAHAM & STRAUS had unlimited means at their command, and had as counsel EDWARD M. GROUT, a highly successful and influential lawyer and politician, the Board naturally felt considerable anxiety as to the result of the suit. These doubts were further intensified by a number of postponements which were made from time to time to suit the convenience of Mr. GROUT. Eventually, however, a hearing was had, briefs were filed, and after prolonged deliberation a decision announced by Justice WALSH, the police justice before whom the case was tried. This decision reads as follows:

#### CITY HALL POLICE COURT.

The People of the State of New York,  
against  
S. F. Rothschild, et al.

Walsh, J.

The defendants are charged with having opened and conducted a store for retailing medicines without having complied with the provisions of Chapter 502 of the Laws of 1879 and the amendments thereof.

The evidence is that a bottle containing about 100 quinine pills and a bottle of paregoric were purchased in the store of the defendants, and that these articles are medicines.

It is admitted that the defendants are not registered pharmacists, and that the sale was not made under the supervision of a registered pharmacist.

The only question in the case seems to be whether or not the defendants retailed medicines.

The District Attorney admits that the medicines were sold in the original packages of the manufacturer. It is claimed on behalf of the defendant that a sale in the original packages is not a retailing within the meaning of this act. I think a consideration of the entire act justifies the conclusion that it was the intention of the Legislature to prohibit and make unlawful the sale of medicines by any persons except those who had complied with the regulations of the Act of 1879, and that the keeping of medicines for sale in the store of the defendants is within the prohibition of Chapter 502 of the Laws of 1879, and that the defendants must be found guilty.

### WHAT CONSTITUTES RETAILING?

Fortunately for justice no quibbles or technicalities were resorted to on the part of the defense, whose claim for exemption rested solely on the interpretation to be placed upon the term retailing. As will be seen by reference to the two briefs published in full in our news columns, this was the sole point argued, and the decision will no doubt be sustained in the higher court. For the case is to be appealed, the papers having already been prepared.

This is a great victory for pharmacy, and the thanks of pharmacists in all the larger cities are due to the Kings County Board of Pharmacy, and especially to the president of the Board, DONALD L. CAMERON, for the very active and unselfish work which has been done in this case on behalf of pharmacy.

### THE ATTEMPT TO UPSET THE REBATE PLAN.

**M**EMBERS of the National Wholesale Druggists' Association doing business in New York City were surprised the other day by the service of papers in the PARK suit for a perpetual injunction against the association, and particularly those members of it who are under the jurisdiction of the Supreme Court of the City and County of New York.

Reduced to its lowest terms the matter at issue is an effort on the part of an Ohio firm of wholesale druggists to compel New York jobbers to do what the Ohio courts have decided to be optional with the jobbers of Ohio. Some two years ago the Ohio firm brought suit in the Supreme Court of Ohio, seeking to compel certain jobbers to supply them with goods which had been previously refused. A temporary injunction restraining the National Wholesale Druggists' Association from interfering with the business of the plaintiff was granted; but when the case came to trial on their application for a permanent injunction the court refused to interfere, and it was held that the defendants were acting well within their legal rights in electing to sell to whom they pleased. The charge of conspiring to restrain trade was made then, as it is now, on the preliminary application for an injunction, but there was nothing to support the charge and the prosecution fell through.

What the outcome of the present proceedings will be cannot well be predicted, but that there is every prospect of a stiff fight is one of the certainties. The Proprietary Committee of the Association have retained eminent counsel to defend the suit, and a united front is to be presented against the claims of the complaining firm.

### THE PHARMACY OF THE NATIONAL FORMULARY.

I.

**T**HE appearance of the newly revised edition of the National Formulary has been hailed with a good deal of satisfaction and some critical comment on the part of the journals and others interested in its success. A preceding issue of *THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD* gave a list of the changes, including the additions and dismissals in this part of the American Pharmaceutical Association. The principal change consists of the adoption of the metric system in place of the old Troy and avoirdupois, which is generally regarded as a step in advance, though some are disposed to think that the advantage would have been greater had alternative systems been used.

As to the additions, the number is not so great as we had hoped for, and many will be disappointed at the absence of formulas for some of the more popular proprietary elixirs. There is a demand for definite formulas for preparations of Peptonate and Albuminate of Iron and of Saw Palmetto, and it does seem singular that while the committee could see their way clear to introducing a formula for a Solution of Bromide of Gold and Arsenic, they should have overlooked the popular combination of Thymol and Eucalyptol, so largely used.

**A FAULTY FORMULA.** The work has evidently been revised with great care, and the new edition is a distinct improvement over the old. It has its faults, however, and these we shall endeavor to point out, and at the same time make suggestions for its improvement. As an instance of a faulty formula, none comes better to our purpose than that intended for the production of Compound Syrup of Hypophosphites. No formula has been more roundly condemned by working pharmacists than this one, which has been transferred without change from the old to the revised edition of the Formulary. Conscious of its imperfections, the committee say, in a foot-note: "It is not intended to be perfectly clear, and should be shaken before using." And yet this formula is offered to the pharmacists of the country for the purpose of displacing the product of the manufacturing pharmacist! Can it be that there was no better formula known to the committee? Surely it is not such a gigantic task to produce a clear and permanent syrup of the hypophosphites. Several satisfactory formulas have been published from time to time in the journals. Professors HEMM of St. Louis and DOHME of Baltimore have each devised satisfactory formulas yielding excellent results. The N. F. formula prescribes the tincture of nux vomica as an ingredient of the syrup,

but why this should be done when we had in strychnine hypophosphite an easily obtained and readily soluble salt is not clear. Then, if the committee wished to make a real compound hypophosphites, why not have used the alkaloid of quinine and ordered it dissolved in a sufficiency of hypophosphorous acid. The original aim of this formula, when first devised, was to replace a certain popular proprietary syrup. But the conditions have changed since the New York and Brooklyn Formulary first made its appearance, and to-day the preparation of the manufacturing pharmacist sells many times where the proprietary does once. The syrups sent out to day by manufacturers are clear, bright, permanent preparations, and it is an impossibility to sell the N. F. preparation in competition with these goods.

Theory is all right and proper in its place, but it is a condition that confronts the pharmacist. "Can I, with these formulas, turn out preparations to equal those made by the manufacturing pharmacist? If not, I must continue either to use other formulas or dispense the proprietary articles." The formula is a mistake and should be amended.

### A Correction.

In the formula for a supersaturated solution of sodium phosphate, printed on page 290 of the preceding issue, sodium nitrite appears as a misprint for sodium nitrate. Our readers will kindly make the necessary correction, as sodium nitrite is decomposed with the evolution of red fumes when brought in contact with the other ingredients.

### Our Circulation in the Northeastern States.

In all the Northeastern States, consisting of New York, New Jersey, Pennsylvania and the six New England States, the largest circulation credited to any publication devoted to drugs, chemicals, pharmacy, etc., is accorded, in the American Newspaper Directory, to *THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD*, a semi-monthly, published at New York, N. Y.—*Printers' Ink*.

### Inquiries by Every Mail.

Under separate cover we mail you to-day our 1896 catalogue containing a full line of our specialties. It affords us much pleasure to state that we are receiving inquiries every mail asking for particulars regarding our milk shakes, ice shaves, lemon squeezers, etc., which we are advertising in the *AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD*.

ERIE SPECIALTY COMPANY.

Z. T. BRINDLEY.

ERIE, PA., March 20, 1896.

### A Pleased Subscriber.

I am very much pleased with *THE AMERICAN DRUGGIST*, which keeps me fully abreast with the times, and consider it one of the most valuable journals ever published in the interest of our profession.

GUST. REHFELD.

ELGIN, TEX.

Written for the  
American Druggist and Pharmaceutical Record.

## A NEW FORMULA AND PROCESS FOR MERCURIAL OINTMENT.

By L. A. HARDING, B.Sc., Ph.D.,  
St. Paul, Minn.

To the busy every-day pharmacist, this ointment has given a vast amount of trouble, not so much in regard to its keeping qualities, but in regard to its manufacture. So much trouble is usually experienced, that now but very few pharmacists attempt to make it. When speaking of this ointment to the majority of pharmacists, they tell you that they cannot afford to spare the time requisite to make a first class article, so now they buy the ready made product from the manufacturer.

Appreciating this difficulty and being desirous to help and lighten the burden of other workers, I propose the following formula and process as one which will give entire satisfaction:

Hydrargyrum.....	3 xij
Oil sweet almonds.....	3 j
Sulphuric ether.....	3 ij
Gum benzoin.....	3 ij
Lard { in official proportions.....	3 xss
Suet {	

The benzoin is powdered, put into a bottle and shaken up with the ether; upon this is poured the mercury and the oil of sweet almonds; the mixture is then shaken with a rotary motion, when presently it will gather into a perfect mass, leaving the bottle perfectly free from any adhering mercury or fat. Its contents may now be poured out into a mortar, and incorporated with a quantity of the official mixture of lard and suet, afterward adding the remainder of the fat and triturating until the mercury is thoroughly extinguished and a perfect mixture results. By this method the ointment may be made in less than two hours, in fact, it has been made by this method in a little more than an hour.

It will be noticed here that the quantity of mercury conforms to the requirements of the U.S. Pharmacopoeia—namely, 50 per cent. It will also be noticed that this ointment contains a small quantity of benzoin which will aid in the preservation of the ointment.

For various reasons the use of oleic acid as a means to aid in the extinguishment of the mercury is not the most advisable mode of procedure. As for the use of old rancid lard, who would countenance the use of rancid material in any preparation?

## A NATIONAL GUARDSMAN ON THE MILITARY PHARMACISTS.

By CHAS. A. RIDGWAY.  
Hydetown, Pa.

I am a pharmacist and am glad to say I consider my profession one needing a practical training as a drug apprentice and then a thorough college course. I graduated from the Philadelphia College of Pharmacy, the first of American institutions of the kind. Before leaving college I thought more than once of entering the navy, as ship's apothecary, after graduation. But the fact that with my practical experience and college training I would be only a non-commissioned officer, messing with the carpenter's mate and humbly touching my cap to my superior officers, would not down with me.

With all the opportunities for serving my country and seeing the world, which a position on one of our magnificent new vessels offers, I would rather be a plain druggist in a country town than ship's apothecary on a flag ship under existing conditions.

### A MILITARY QUAKER.

Yet I confess that, notwithstanding my Quaker descent, I have a leaning toward things military. So, when asked if I would like the position of hospital steward on the staff of the Sixteenth Regiment, Second Brigade, N. G. P., it did not take much persuasion to get me to make application. I was duly appointed last summer, so my military experience is not extensive. Yet it is enough to give me something of an insight into the position I hold and to enable me to form opinions therefrom. Personally, I have no occasion to grumble. The commissioned officers of the staff and my fellow non-commissioned officers are all friendly and agreeable. I enjoyed last summer's encampment very much and look forward to the coming encampment.

### NO CHANCE FOR PROMOTION.

But here is the rub. My practical experience and my college training fit me for the rank of sergeant only, and what is more, so long as I remain in the hospital service I can hope for nothing better.

The young physician who is my friend at home is in service my superior officer, ranking as first lieutenant. When he becomes surgeon he will be a major. He may rise to be surgeon-general. The new recruit who, in doing police duty, picked up the cigar stumps in front of my hospital tent may rise to the command of the regiment, as our colonel has done, and he may some day command the division. Since my enlistment, the leader of the band has been raised from a non-commissioned staff officer to the rank of lieutenant (Act of Leg., Session of 1895). My other mates, as non commissioned staff officers, the three sergeant-majors, the color sergeant, the quartermaster-sergeant, and the commissary-sergeant, are all in the line of promotion and next to commissions. But for me there is no advancement. Though I should prove myself of exceptional ability and ever faithful, I would still be a sergeant of the staff, eating below the salt. This is the situation as I understand it in the State guard, and the State guard is, I understand, modeled closely upon the regular army.

### BETTER CHANCE AS A PRIVATE.

I like the hospital service very much and feel myself fitted especially for it. Yet, in case of war, instead of the sergeant's sword and the green chevrons and red cross of mercy, I would rather start out carrying a rifle and wearing the plain blouse of a private and take my turn at guard duty and police duty. For if there should be anything in me I would then have a chance to work up. The position of hospital steward offers no inducements to men of ability, and it is men of ability that the hospital service needs. The service calls for the ability without adequate recognition or compensation.

The bills intended to remedy the state of affairs are not satisfactory to me. They ask for a scant half loaf, when we are actually entitled to a whole loaf. Those who drew the bills realize that

they do not give the military pharmacist his due, but they were afraid to ask for more, fearing refusal.

### MODEL THE PHARMACEUTICAL SERVICE ON THE QUARTERMASTER SERVICE.

My idea is to enlarge the scope of usefulness of the military pharmacist. Give him full and direct control of the hospital and all that pertains thereto, and make him one peg lower in rank than the surgeon. By training he is better fitted than the surgeon for some of the duties which that officer now attends to. Especially should he be the one to see to the procuring of hospital supplies and to pass upon their being of standard quality. I would say, make the hospital service something like the quartermaster's department. The pharmacist in charge of a regimental hospital to be a second lieutenant, and proportionately higher rank for those in charge of brigade, division and general hospitals. That would start the military pharmacist with an adequate rank for a beginning, and would give him something to work for for the future. As it is now, he is a sergeant, and, as is the case with no other non-commissioned officer, as far as I know, he has no hope of promotion. Yet no other non-commissioned officer requires so high a degree of training and education. It is not just to the pharmacist that it is so, and it is not to the interest of the service. If the physician were given no better recognition in the service than is given the pharmacist, how many able practitioners would desire to become military surgeons? Is it not probable that if the military pharmacist was adequately recognized, able men would be attracted to the service? In the armies of most of the European powers military pharmacists are commissioned officers, with a wide and important scope of duties, as analysts, etc., and rank up to colonel, and in France and Russia as high as general. In the United States Army they are sergeants, and not sergeants of the highest grade then.

Place the pharmacists and the hospital service upon the same plane as the quartermaster and the quartermaster's department, and you will attract to the service men from among the brightest of the graduates of our colleges of pharmacy and they will prove worthy.

### Grocers' Drugs in France.

In a country where the laws regulating the sale of drugs by pharmacists are so stringent, it is strange that grocers should be permitted to sell them. We refer to the sale of candies and pastils of santonin by grocers. These famous vermifuge lozenges are a veritable poison, as every physician who is at all familiar with the effects of this powerful alkaloid (*sic*) knows. The law which forbids a pharmacist to sell 20 drops of laudanum without a physician's prescription permits a grocer, to distribute santanin, thus prepared by the pound. Many serious accidents have occurred in this way, and there are other new ones to be found in the *Journal de Médecine de Paris*. Dr. Leo, in a valuable article on the subject, also cites several. The same may be said of poppyheads, of which decoctions are imprudently made as sleeping potions for children and invalids, not only in the country but even in Paris.—*Paris Letter in Med. Rec.*



# A Synopsis of the Pharmacy Laws of the United States.\*

## A Summary of the Principal Provisions of the Various Laws Pertaining to the Practice of Pharmacy.

By J. H. BEAL,  
Scio, Ohio.

**T**HE object of the following papers is to present in a form convenient for reference, and free from legal verbiage, the principal features of the several pharmacy laws of the American Union, the provisions chiefly referred to being as follows: The dates of enactment and amendment of the laws and the extent to which they apply over the State. The constitution and selection of the examining boards, their revenues, powers, and compensation; the grades of licenses issued, the legal qualifications of licentiates, and the credit allowed for diplomas in medicine and pharmacy; and the fees for registration and renewal, provisions affecting adulterations, the labeling of poisons, etc.

*Unless otherwise expressly stated in the abstracts given it is to be understood:*

1. That each law applies territorially to the entire State which enacted it.
2. That the style of the examining board is simply Board of Pharmacy or State Board of Pharmacy.
3. That the number of years for which the members hold office is equal to the number of members on the board, i.e., if the board has five members the term of office is five years.
4. That the statutory titles of the licentiates are Registered Pharmacist and Registered Assistant, or Assistant Pharmacist.
5. That the certificates of other boards and diplomas of colleges of pharmacy and medicine are not recognized by the law.
6. That there is no statutory requirement of age and experience.
7. That no renewal of registration is required.
8. That the Pharmacy Act does not prohibit adulterations nor require the labeling of poisons.
9. In general that when the abstract does not mention any particular subject, it is because the pharmacy law is silent upon the point in question.
10. That certain provisions uniformly present in all the laws are omitted, such, for example, as the provision for the registration without examination of those engaged in pharmacy at the time of enactment of the law. Such provisions are of temporary and local interest only and would occupy space without imparting information.

In order to avoid needless repetition, the following general forms of poison and label laws are given, and are referred to by number under the States which have the same or similar provisions:

### General Form of Poison and Label Law.

#### FORM NO. 1.—Schedule A.

Arsenic, and its preparations, corrosive sublimate, white precipitate, red precipitate, red mercuric iodide, potassium cyanide, hydrocyanic acid, strychnine, and all other poisonous alkaloids and their salts, essential oil of bitter almonds opium and its preparations, excepting paregoric and other preparations of opium containing less than 2 grains to the ounce.

#### Schedule B.

Aconite, belladonna, colchicum, conium, nuxvomica, henbane, safin, ergot, cotton root, cantharides, creosote, digitalis, and their pharmaceutical preparations, croton oil, chloroform, chloral hydrate, zinc sulphate, mineral acids, carbolic acid and oxalic acid.

The articles contained in both schedules must be labeled, both on the container and on the outside wrapper, with the name of the article, the word "Poison," and the name and place of

business of the seller. Nor may any such article be delivered until it has been ascertained that the purchaser is aware of its poisonous character and desires it for a legitimate use. In addition to the preceding, when any article in Schedule A is sold an entry must be made in a book kept for the purpose, stating the date of the sale, the name and address of the purchaser, the name of the article, the purpose for which it is to be used, and the name of the dispenser. This record must be preserved for at least five years. The requirements as to labeling and recording do not apply to poisons dispensed on physicians' prescriptions, when not in unusual quantities or doses.

#### FORM NO. 2.

The same as No. 1, except that all named poisons are embraced in one schedule and that the recording of the circumstances of the sale is not necessary.

Variations from the above forms are noted under the laws in which they occur.

It should also be remembered that the synopsis purports only to give the provisions of the "Pharmacy Act" itself. The criminal code of the State may contain other laws affecting the practice of pharmacy, or the State Board may have rules fixing fees less than allowed by the statute, or requiring age and experience when the law does not. In only a few laws are such facts referred to.

Some of the laws are so loosely drafted as to leave the meaning of certain provisions in doubt. In such cases the writer has adopted that interpretation which seemed to him most probable.

In some instances the date of enactment could not be obtained, and in the case of a few others the dates given are open to doubt. The writer will be thankful for the correction of any errors which he may have made. The writer desires to express his obligations to the Secretaries of various boards, for courtesies shown, and to Caswell A. Mayo, Editor of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, for assistance in procuring copies of the laws and for revising the abstract of the laws of New York.

### Minnesota.

Enacted 1885. Amended 1891.

The board consists of five members appointed by the Governor from nominees presented by State Pharmaceutical Association. The secretary receives a salary determined by the board, and the members \$5 per day and expenses. The secretary need not be a member of the board. Meetings are to be held quarterly. Excess of receipts above expenditure are to be held as a fund for enforcement of the law.

Two grades of licentiates are recognized. Pharmacists must have four years' experience, and if not graduates in pharmacy or medicine must be 21 years of age. Assistants must be 18 years of age and have two years' experience.

Graduates of colleges of pharmacy and medicine approved by the board, and persons legally entitled to practice medicine in Minnesota, are registered without examination, provided they have had four years' experience in a drug store. The board may at its option register without examination the licentiates of other States.

The fee for registration by examination is \$5 for both grades; for registration alone, \$3. An annual renewal is required, the fee for which is \$3 for pharmacists and \$1 for assistants. Licenses are revocable by conviction for adulteration, and for failure to pay fines assessed under the statute. Every certificate of registration must bear the words: "Revocable for the causes specified by law."

General retail dealers may sell proprietary medicines, a list of 18 common drugs and chemicals, including Paris green, if labeled poison, and, if located more than 1 mile from a registered pharmacist, they may sell the "commonly used medicines and poisons, if put up for such sale by a registered pharmacist."

Pharmacists are held responsible for the quality of goods dispensed by them, except when sold in original packages of the manufacturer, and proprietary articles.

The knowing and fraudulent adulteration, falsification or dilution of any drug or medical substance, or any preparation recognized by the U. S. P., or intended to be used in medical practice, and the intentional sale of the same for medicinal purposes are declared to be misdemeanors. The poison law corresponds to Form No. 2, except that it does not name henbane, safin, ergot, cotton root, cantharides and mineral acids, and names in addition thereto laudanum, morphine, oil of tansy and sugar of lead, and also "any poisons commonly recognized as such." Physicians' prescriptions are excepted.

Persons registered under the act are exempt from jury duty.

In addition to the pharmacy act the criminal code contains certain provisions affecting the labeling and sale of poisons. A failure to label, or the wrongful labeling of any substance, or any mistake in compounding or deviation from the terms of a prescription, in consequence of which life is endangered, is declared a misdemeanor. Sales of arsenic or its preparations, aconite, belladonna, lead or its preparations, mercury or its prepara-

\* We have published abstracts of a number of State laws in this series, as follows: Alabama, Arkansas, California, Colorado and Connecticut in the issue for March 25, p. 180; Delaware, District of Columbia, Florida, Georgia, Idaho and Illinois in the issue for April 10, p. 213; Iowa, Kansas, Kentucky, Louisiana, Maine and Maryland in the issue for April 25, page 246; Massachusetts and Michigan in the issue for May 11, page 272.

tions, hydrocyanic acid, oxalic acid, copper or its preparations, phosphorus, oils of savin and tansy, morphine, strychnine, laudanum, "Rough on Rats" and cyanide of potassium must be recorded in the usual manner. Sales on prescription and sales of paris green are excepted. All of the last named substances and oil of cedar, carbolic acid, tincture of nuxvomica, fluid extract of ergot and cotton root, chloroform, chloral hydrate, croton oil, zinc, sulphate of, mineral, acids, stramonium, conium, opium and its preparations, except paregoric, and Dewees' carminative, must be labeled with the name of the article, the word poison, and the place of business of the seller. This last provision does not apply to substances dispensed on prescriptions or order of a physician.

### Mississippi.

Enacted 1892.

The Board of Pharmaceutical Examiners consists of five members appointed by the Governor, their terms of office expiring with that of the latter official. "Any or all of the members" may be removed at the will of the Governor. The board is authorized by the law to distribute among its members the fees received from licensees. Two meetings are held yearly at the State capital.

But one grade of license is issued, and no specific title is attached to the holder. The statute does not make any provision regarding age or experience, nor exempt any from examination save those in practice at the time of the enactment. Evidence of good moral character is required of applicants. The fee for examination and license is \$5.

The law requires all examinations to "be upon written questions and answers," and hence would seem to prohibit the introduction of anything in the nature of a practical test of the candidate's knowledge. A single member of the board may examine an applicant, and grant a "temporary license," which shall be valid until the succeeding meeting of the board, but only one such license may be issued to the same person. Every license must be filed for record with the clerk of the circuit court of the county in which the holder resides.

The pharmacy act does not provide for the sale of poisons. The following provisions are taken from the criminal code:

Morphine and its compounds must be wrapped in scarlet paper and bear a scarlet label printed in white letters, and may be dispensed only on the written certificate of a reputable practicing physician. The certificate shall set forth the necessity of the drug, name the person for whom it is intended, and shall be preserved by the dispenser.

Except when dispensed upon prescription, every substance "belonging to the class usually known as poisons" must when sold be labeled poison, and a record kept showing the amount sold, the purpose for which it is intended, the date of the sale, the age, sex, color and residence of the purchaser, and the name and residence "of the person for whom the article is intended." Such articles may not be delivered to minors. Except when sold to physicians, any quantity of arsenic less than 1 pound may not be sold unless mixed with soot or indigo in the proportion of 1 ounce of the former or 1/2 ounce of the latter to 1 pound of arsenic. The manufacture, sale or offering for sale of any adulterated food or drug, or of confectionery containing any prepara-

tion of lime or other deleterious substance, is prohibited.

The counterfeiting of any wrapper or label, or having in possession with intent to counterfeit such wrapper or label, any dies or plates for printing the same, or the sale of any article bearing such a wrapper or label, knowing the same to be a counterfeit, without informing the purchaser of the fact, is made a misdemeanor. Apothecaries may keep open shop on Sunday for the sale of medicines only.

### Missouri.

Enacted for St. Louis 1874. Extended to whole State in 1881. Amended 1883, 1887, 1892, 1894.

The Board of Pharmacy consists of three persons, "not connected with any school of pharmacy," appointed by the governor with the approval of the Senate. The board determines the times and places of its meetings. The law does not specifically mention compensation, but implies that the board shall retain the fees received for examination and registration. There is but one grade of licentiate.

The fee for examination and registration is \$3. The certificate of registration must be recorded by the clerk of county court in the county where the holder does business. The fee for such record is 50 cents.

Unregistered persons may sell proprietary medicines.

The pharmacist is held responsible for the quality of drugs, save for patent medicines and those sold in the original packages of the manufacturer. Willful and fraudulent adulteration is made a misdemeanor.

The poison and label law corresponds to Form No. 1, with the following exceptions: Schedule A omits corrosive sublimate, white and red precipitate and opium and its preparations. Schedule B includes the articles omitted from A, and veratrum.

Druggists may neither sell nor give away alcoholic liquors in quantities less than 4 gallons, except on the prescription of a regularly registered physician, dated, and stating the name of the patient and that the liquor is necessary as a medicine.

Alcohol may be sold for use in the arts, science, or for mechanical purposes, on the written application of the user who is known to the pharmacist as a mechanic, scientist or artist. Wine may be sold for sacramental purposes.

Druggists shall not permit the drinking of intoxicating liquors, nor sell nor give away alcoholic liquors or compounds to be used as a beverage at or about their places of business.

The original of every prescription must be numbered, dated, and preserved by the pharmacist.

Certificate of registration may be revoked for violation of the provisions relative to adulteration, or for the illegal sale of liquors.

### Montana.

Enacted 1895.

The State Board of Pharmacy consists of three members, at least one of whom must be a graduate in pharmacy, appointed by the Governor from nominees presented by the Montana Pharmacal Association. The members receive \$5 per day and their expenses, and the secretary, in addition, a salary not exceeding \$150 per annum. The board may not meet more than twice annually, at such

times and places as it may determine. Annually all funds held by the treasurer in excess of \$800 are paid into the State treasury.

The law provides for two grades of licentiate. Pharmacists must be 21 years of age and have four years' experience, and assistant pharmacists must be 18 years of age and have one year's experience. Graduates of schools of pharmacy which shall be approved by the board are registered as pharmacists without examination, provided they have had two years' experience.

The fee for examination and registration or for registration on diploma as pharmacist is \$5; for examination and registration as assistant, \$1. There is an annual renewal fee of \$2 for both grades. Failure to renew within 30 days after receipt of notice from the secretary annuls the registration, and the licentiate must pass another examination to be restored to the register. General dealers may sell "such poisons, acids and chemicals as are regularly used in agriculture, mining and the arts, when kept and sold for such purposes only, in sealed and plainly labeled packages;" and in towns of less than 500 inhabitants, where there is no licensed pharmacy, they may sell "such medicines, compounds and chemicals as are required by the general public."

Pharmacists are held responsible for the quality of goods dispensed by them, except for proprietary articles and for goods sold in the original packages of the manufacturer.

Willful adulteration, alteration or substitution, with intent to defraud the purchaser, is declared a misdemeanor.

The poison and label law corresponds to Form No. 2, except that henbane, savin, ergot, cotton root, cantharides and creosote are omitted from the list of enumerated poisons.

Itinerant vendors of nostrums or appliances for the cure of disease, injury or deformity, are subject to a license fee of \$50 per annum in each county in which they attempt to do business.

Penalties collected for violation of the section relating to adulterations inure to the common school fund. Other penalties inure to the State.

(To be continued.)

### Hyoscine, So-called, is Scopolamine.

Hyoscine hydrobromate was admitted to the United States Pharmacopoeia, 1890. The German Pharmacopoeia of the same issue also made this product official, but in a supplement, issued a year later, the Pharmacopoeia Commission adopted the name *Scopolamine Hydrobromate* to replace "Hyoscine." The reason for this change is that nearly all the hyoscine supplied by manufacturing chemists is made from *Scopolia Atropoides*, and hence "Scopolamine" more correctly indicates the source of the alkaloid. In this country the name hyoscine is, moreover, alleged to be a trade-mark, and as a consequence it is sold at an exceptionally high price. C. F. Boehringer & Soehne, taking these facts into consideration, have recently put in stock this product labeled thus: "Scopolamine Hydrobromate, identical with Hyoscine Hydrobrom., U. S. P." A note by Heese on page 304 gives further details as to the identity of the two substances.

# Influence of Certain Groupings on the Physiological Action of Synthetic Remedies.

BY PROF. VIRGIL COBLENTZ, Ph.G., M.A., Ph.D.,

Of the College of Pharmacy of the City of New York.

Professor Coblentz was invited to address the Maryland Pharmaceutical Association at its recent meeting in Baltimore, and the following paper was prepared and presented by him in response to this request. The paper is one of peculiar value, as it presents in a comprehensive way the present condition of our knowledge upon the subject, and does this, moreover, so lucidly and so forcibly as to make it of interest even to one not familiar with the subject.

The subject of synthetic remedies has become one of ever increasing importance; according to recent estimations we have thus far between two and three thousand compounds belonging to this class. Many of these are true synthetic products, while others are mixtures or various combinations of these, and but very few find a permanent place in medicine. Owing to the fact that the majority of the chemical names for this class of compounds are long and complicated, it is customary to select a commercial title which shall be convenient in use, conveying, if possible, an idea as to its medicinal properties. This has been successfully applied in such instances as antipyrin (phenyl-dimethyl pyrazolon), antifebrin (acetanilid), tolpyrin (tolyl-dimethyl-pyrazolon), etc.; however, many unfortunate titles have been selected; thus two compounds which do not bear the slightest relationship to one another have similar or like titles, for example, euphorin and euprophen, acetal (ethylene-di-ethyl ether), and acetal (a mixture of acetic ether and essential oils). Frequently a new remedy is introduced which bears chemically a close relationship to one already introduced, hence a title is selected which indicates this; for example alpol and betol are both naphthyl esters of salicylic acid, the former being prepared from *alpha*, while the latter is made from *beta* naphthol.

Various ones of the newer remedies are simple mixtures prepared with the view of increasing the effect or to secure greater solubility of the main active constituent; thus we have eulyptol (containing eucalyptus oil, phenol, salicylic acid), somnal (chloral, urethane and alcohol); antinervin and antikal both being mixtures of acetanilid with tartaric acid and sodium bicarbonate, or salicylic acid and ammonium bromide; in hypnal we have a mixture of antipyrin and chloral.

## INFLUENCE OF THE PRESENCE OF NITROGEN.

In general, we find those compounds which contain nitrogen more toxic than those which are free from it, also those which contain sulphur, selenium and tellurium form many poisonous combinations. As exceptions, we find many albuminoids which contain a high percentage of nitrogen and those hypnotics which contain sulphur. On closer examination, we find that the grouping of the nitrogen and sulphur with the other elements of the compound is different in the toxic and non-toxic compounds.

If we replace the oxygen of the hydroxyl of an alcohol, harmless in itself,

by sulphur, we obtain the poisonous SH group peculiar to the mercaptans.

The poisonous character of the alkaloids is not altogether due to the presence of the nitrogen in itself (for we find in the urea derivatives that nitrogen forms harmless combinations), but to its peculiar molecular configuration in the pyridin and chinolin rings.

## CHEMICAL PROPERTIES DEPENDENT ON GROUPINGS.

The chemical, as well as the physiological properties of organic compounds are dependent on certain groupings, those with similar groups possess similar action; thus all the monohydric alcohols in which an OH group is united with an aliphatic radical (which consists of a carbon combined with a *maximum* amount of hydrogen), we find to possess stupefying properties; for example, methyl (CH<sub>3</sub> OH), ethyl (C<sub>2</sub>H<sub>5</sub> OH) and pentyl (C<sub>5</sub>H<sub>11</sub> OH), alcohols. Also the phenols, which likewise contain OH groups, united with radicals which contain relatively a much *smaller* proportion of hydrogen, all possess powerful antiseptic properties, as phenol (C<sub>6</sub>H<sub>5</sub> OH), cresol (C<sub>7</sub>H<sub>7</sub> OH), and naphthol (C<sub>10</sub>H<sub>7</sub> OH).

Among the simpler inorganic compounds the chemical deportment and physiological action is in the rule dependent upon certain elementary atoms.

## EFFECT OF MOLECULAR WEIGHT.

Attention has often been called to the similarity of action of the inorganic compounds potassium, mercury, iron and zinc, also those of phosphorus, arsenic and antimony, and manganese and cadmium. Comparing the alkali metals it has been shown that the potassium salts owe their more prompt action, as compared to those of sodium, to their higher molecular weight and greater electrolytic conductivity. For similar reasons, the rubidium salts may naturally be expected to take a still higher position.

The electrolytic conductivity of the iodides of these metals show a similar ascending progression like unto that of the molecular weights, thus:

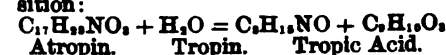
Element—	Na.	K.	Rb.
Molecular Wt. ....	23	39	85.4
Elect. cond. of Iodides .....	105.7	128.5	180.6
Dilution 32.			

These data are said by Erdmann not only to represent the actual and relative rapidity with which the different iodides are distributed throughout the organism, under the influence of osmotic pressure and electrical currents, but the data also afford a direct measure of their degree of medicinal activity, for physiological activity is conditioned upon the ability to

enter into chemical reactions, and according to Ostwald's law, chemical activity is proportional to the electrolytic conductivity. This explains why the practitioner prefers potassium iodide to the sodium salt, although the latter contains 85 per cent. iodine, as compared to 76 per cent. in the former. Also upon these grounds rubidium iodide, containing about 90 per cent. of iodine, is receiving attention, it being claimed to be far more active than either of the other iodides.

## IN ALKALOIDS THE EFFECT DEPENDS ON MORE THAN ONE GROUP.

Among the alkaloids, we find that the physiological action depends on more than one group; thus for example, the synthesis of atropine resulted from the coupling of the products of its decomposition:



In place of tropic acid various other organic acids have been combined with tropin, and only those which contain a secondary alcohol radical (CH—OH) yield compounds which possess a mydriatic action; to this class belongs the well-known homatropin.

## EFFECT OF INTRODUCING CHLORINE.

The introduction of chlorine in the molecule of a hydrocarbon imparts a toxic effect, increasing with the number of chlorine atoms; thus we have:

Mono-chlor-methane—CH<sub>3</sub>Cl

Methyl chloride.

Di chlor-methane—CH<sub>2</sub>Cl<sub>2</sub>

Methylene chloride.

Tri-chlor-methane—CHCl<sub>3</sub>

Chloroform.

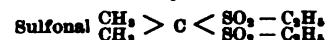
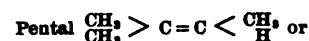
Tetra chlor-methane—CCl<sub>4</sub>

Carbon-tetrachloride.

## THE INTRODUCTION OF METHYL GROUPS.

Again, the introduction or substitution of methyl groups, under certain conditions, causes a marked neutralization of the toxic effect of the body in question. Thus the hypnotic action of sulfonal is greatly lessened by the substitution of methyl for ethyl groups. Xanthin, caffeine and theobromine are homologues; the tetanic effects exhibited by xanthin (C<sub>8</sub>H<sub>4</sub>N<sub>4</sub>O<sub>6</sub>) are found only in a greatly reduced degree in its *methyl* derivatives caffeine (C<sub>8</sub>H<sub>10</sub>(CH<sub>3</sub>)<sub>2</sub>N<sub>4</sub>O<sub>6</sub>) and theobromine (C<sub>7</sub>H<sub>8</sub>(CH<sub>3</sub>)<sub>2</sub>N<sub>4</sub>O<sub>6</sub>). Similar relationship exists between strychnine and brucine.

The tertiary united carbon is *hypnotic*, as in—



As we will later see slight alterations in the structure of these bodies, such as the introduction of new groups, preparation of homologues, etc., produce marked differences in physiological action. A careful study of this feature applied to a large number of synthetic compounds has demonstrated that certain normals, in the configuration of the constitution of certain bodies, occur with regularity in antipyretics, hypnotics and other remedies.

## In this study

## PROGRESS IS SLOW AND DIFFICULT,

and if all conditions are not carefully considered, erroneous results may be obtained. Thus substances which persis-

tently resist the action of reagents in the laboratory, readily break up under the influence of the vital processes in the organism, while the reverse is true of readily decomposable substances, these undergoing no change in the system. Again, many bodies react contrary to expectations, because they undergo unexpected changes in the organism, becoming altered before performing the action desired. Solubility plays a very important role.

#### SINGULAR APPARENT CONTRADICTIONS.

We likewise find singular contradictions, an instance being found in the fact that antifebrin and antipyrin, remedies having no chemical relationship to one another, produce similar effects on the animal organism. Again, on the other hand, bodies which are chemically closely related, are found to possess widely different physiological action; for instance, red phosphorus is non toxic, while the yellow is the reverse.

#### EFFECT OF GROUPINGS IN ISOMERIC BODIES.

Among the oxy-benzoic acids of the general formula ( $C_6H_4 < \begin{smallmatrix} OH \\ COOH \end{smallmatrix}$ ) we have three possible, differing from one another in the relative position of the OH and COOH groups. Indicating the six hydrogens of the benzene nucleus by the numbers 1, 2, 3, 4, 5, 6, and replacing two of them by the above groups, we have the ortho-oxy-benzoic acid (salicylic acid) 1 : 2; in meta-oxy-benzoic acid, we have the positions 1 : 3, and in the para-oxy-benzoic acid we have 1 : 4. The relatively slight difference in the constitution of these three isomeric acids is accompanied by marked difference in physiological action, the meta and para acids being inferior to salicylic acid in antiseptic power, and exhibiting toxic effects internally. This difference must be ascribed to the relative proximity of the OH and COOH groups to one another. This peculiarity in salicylic acid extends also to naphtho-benzoic acid ( $C_{10}H_7 < \begin{smallmatrix} OH \\ COOH \end{smallmatrix}$ ) and cresotic acid ( $C_8H_7 < \begin{smallmatrix} CH_3 \\ OH \\ COOH \end{smallmatrix}$ ) valuable antiseptics in

which the OH and COOH groups occupy the same relative positions as in salicylic acid. Thus, while mono-hydroxy-benzene (phenol  $C_6H_5OH$ ) and amido benzene (anilin  $C_6H_5NH_2$ ) are poisonous, para-amido-phenol ( $C_6H_4 < \begin{smallmatrix} OH \\ NH_2 \end{smallmatrix}$ ) which contains both groups, is relatively non-toxic. Ethylated and acetylated para-amido-phenol, (phenacetin) is antipyretic.

Many other inexplorable examples might be given; this, however, should not distract our attention from a most important subject, even though we are not at present able to offer satisfactory explanations for these apparent contradictions to the theory.

#### Antipyretics.

##### THE ANILINE (AMIDO-BENZENE) GROUP.

##### $C_6H_5NH_2$

Those compounds arising from the introduction of acid radicals into amido-phenol ( $C_6H_4 < \begin{smallmatrix} OH \\ NH_2 \end{smallmatrix}$ ) are more energetic than the alkylated amido-phenol derivatives, since the acid group is more easily split up in the organism than the alcohol group. Through the introduction of an acid radical into the amido

group of para-amido-phenol, its toxic effects are lessened, and are still further diminished by the simultaneous entrance of an acid radical into both the amido and hydroxyl groups. If instead of one of the acid radicals, an alcohol radical be substituted in the hydroxyl group, a compound results (phenacetin) which is milder than either of the above. Von Mehring explains the intensity of the action of para-amido phenol by the simultaneous presence of the OH and  $NH_2$  groups. The activity of para-amido-phenol is lessened through the introduction of esters, and still further diminished by the introduction of alkyl or carbamic esters (urethanes).

#### CONSTITUTION OF ACETANILID.

The most important substitution product among the different anilides, is acetanilid ( $C_6H_5NH-CO-CH_3$ ), the antifebrile effects of which are well known. Here the poisonous action of anilin,  $C_6H_5NH_2$ , ceases with the introduction of an acid radical. The introduction of the benzoyl group in anilin gave benzanilid,  $C_6H_5NH-CO-C_6H_5$ ,

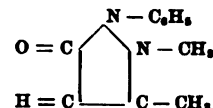
a body having an action similar, but far less potent than acetanilid, hence adapted for administration to children. The same can be said of formanilid— $C_6H_5NH-CO-H$ —and salicylanilid,  $C_6H_4 < \begin{smallmatrix} OH \\ CO \end{smallmatrix}$ . Efforts to mitigate the unpleasant after effect (collapse) produced by acetanilid, have led to the introduction of various groups calculated to nullify this action.

From this table it will be seen that by the introduction of an alkyl or oxy-alkyl group in the para position in the benzene

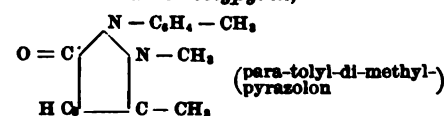
which a hydrogen is replaced by an amido group; on introducing an acetyl group ( $CH_3CO$ ) into this, hydracetin



was formed, but owing to its powerful toxic properties (dose 0.05), this was not favorably received. Knorr took up this idea, and by forming a condensation product between phenyl-hydrazin and ethyl-aceto-acetic-ester ( $CH_3-CO-CH_2-CO-OC_2H_5$ ), and this on methylating yielded phenyl-dimethyl-pyrazolon or antipyrin



Since this discovery numerous experiments have been made to produce bodies of equal therapeutic value, by introducing certain groups into the phenyl radical; thus Riedel prepared a methyl derivative by introducing a methyl group in the para position of the phenyl group, which he named *tolpyrin*,



Comparative experiments have shown that this new body is equal to antipyrin not only in degree, but also in the manner of its therapeutic action. In most cases 4 gm. of tolpyrin performed the same work as 6 grammes of antipyrin.

		Solubility.	Dose.
$C_6H_5NH-CO-CH_3$ .....	Acetanilid.....	1-194	0.25-0.5 Gm.
$C_6H_5 < \begin{smallmatrix} OH \\ NH-CO-CH_3 \end{smallmatrix}$ (1)	Phenacetine (p. acet phenetid.).....	1-1400	0.5-1.0 Gm.
$C_6H_5 < \begin{smallmatrix} OH \\ NH-CO-CH_3 \end{smallmatrix}$ (4)	Methacetine (p. oxy-methyl-acetanilid.).....	1-530	0.1-0.2 Gm.
$C_6H_5N < \begin{smallmatrix} CH_3 \\ COCH_3 \end{smallmatrix}$ (1)	Exalgine (methyl acetanilid.).....	Insol.	0.4-0.8 Gm.
$C_6H_5 < \begin{smallmatrix} CH_3 \\ NH-CO-CH_3 \end{smallmatrix}$ (1)	Para-acet-toluid.....	1-1800	0.5-1.0 Gm.
$C_6H_5 < \begin{smallmatrix} OH \\ NH-CO-CH_2NH_2 \end{smallmatrix}$ (2)	Phenocoll (p. amido-acet-phenetid.).....	1-20 (HCl salt)	0.5-1.0 Gm.

nucleus, the nature and the energetic action of acetanilid is altered. For example, in phenacetine an oxy-ethyl group is introduced in the para position to the acetyl group; its homologue methacetine, contains likewise an oxy-methyl group in the para position, but these two bodies, contrary to anticipation, have a weaker effect than acetanilid, which is, however, accounted for by their comparative insolubility and the difficulty with which they split up in the organism. Exalgine, a methylated acetanilid, suffers a loss in antipyretic effect because of its insolubility; acet-toluid is likewise feebly antipyretic.

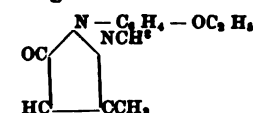
#### INCREASE OF SOLUBILITY DOES NOT ALWAYS INDICATE INCREASE OF ACTIVITY.

On the contrary, increased solubility does not always indicate increased activity; for example, Schering, in order to increase the solubility of phenacetin, introduced an amido group ( $NH_2$ ) in the side chain which enabled it to readily form salts; thus the hydrochloride of phenocoll is soluble 1 in 20, and yet it is given in same doses as phenacetin. Neurodin, an aceto-para-oxyphenyl urethane, in doses of 1 gm. is an active anti-neuralgic. Through the introduction of an ethyl group, as in thermodin, we find it to be antipyretic in doses of 0.5 gm.

Phenyl-hydrazin,  $C_6H_5NH-NH_2$ , may be considered a derivative of anilin, in

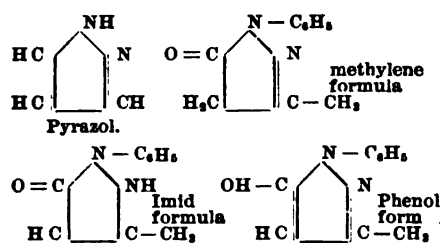
#### EFFECT OF ALKYL OR OXYALKYL GROUP.

Thoms suggested that the introduction of an alkyl or oxy-alkyl group in the benzene nucleus reduced the energetic action of acetanilid. With this view, he prepared a like derivative of antipyrin to note the effect produced by these groups in the benzene nucleus to the pyrazolon ring.



Para-antipyrin (para-ethoxy phenyl-dimethyl pyrazolon) was prepared, and from clinical experiments it was found that instead of diminishing the effect of antipyrin the ethoxy group increased it to such an extent as to render it useless in medicine. That the introduction of a methyl group in antipyrin has given a more active body, tolpyrin, finds a parallel in the fact that cresol,  $C_6H_3 < \begin{smallmatrix} OH \\ CH_3 \end{smallmatrix}$ , which differs from phenol,  $C_6H_5OH$ , only in a methyl group, is characterized by a stronger antiseptic action. That we find the secondary effects of antipyrin suppressed in tolpyrin may be accounted for by the comparative insolubility of the latter, it being much more slowly absorbed by the system. Knorr cites among examples of tautomerism in the pyrazol

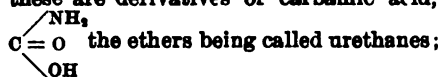
series three forms of phenyl-methyl-pyrazolon, thus:



from these he prepared six different methyl derivatives. The alkyl derivatives of the phenol forms show no trace of antipyretic action, while those of the methylene and imid formula, including antipyrin, all possess well defined antifebrile properties.

#### Hypnotics.

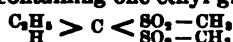
In this division the amido group does not play any important part. Many of these are derivatives of carbamic acid,



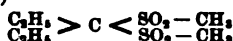
the ethyl ether  $\text{C}(\text{NH}_2)(\text{O}-\text{C}_2\text{H}_5)_2$  forms the excellent hypnotic urethane.

ETHYL GROUPS IN DISULFONIC COMPOUNDS INTENSIFY THE EFFECT.

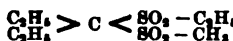
Some very interesting work has been performed by Baumann, who compared the physiological action of sulfonal to bodies of similar constitution, the disulfones. "Among the disulfones only those which contain ethyl groups are active, and the intensity of the effect of these depends on the number of ethyl groups contained in the molecule." A disulfon containing one ethyl group,



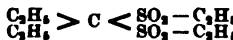
produces an effect only half as intense as that of one containing two ethyl groups (sulfonal)



Again, sulfonal is far less active than trional, a disulfon containing three ethyl groups



The most active of them all is tetronal, a disulfon containing four ethyl groups, thus:



A disulfon containing four methyl groups is without medicinal effect.

In certain configurations the ethyl group plays a certain pharmacological part, which, under like circumstances, is shown by the methyl group. In the above instance the comparison affords us valuable conclusions. To illustrate the vast difference in their effect on the system, Baumann administered doses of 1.5 gm. per kilo of the four fold methylated disulfon without any visible effect, while a dose as small as 0.8 gm. per kilo of the tetronal (four fold ethylated disulfon) produced powerful toxic effects.

#### HOW CHLORAL ACTS.

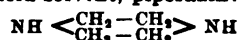
To this class of hypnotics belong such substances as readily split off chloroform or chloral. The administration of chloral depends for its effect upon the fact that in the system it is split up into chloroform, as is accomplished by alkalis. To this same category belong butyl chloral,

chloralose (chloral and fruit sugar), uraltum (condensation product of chloral and urethane).

Ordinary aldehyde ( $\text{CH}_3\text{COH}$ ), the primary oxidation product of alcohol, is powerfully stupefying, and hence cannot be used as a hypnotic, through condensation, however, it is converted into the non-volatile and milder form of par-aldehyde ( $\text{C}_3\text{H}_4\text{O}_3$ ), which, in the system, is probably broken up again into ordinary aldehyde. For like reasons, methylal and acetal have been recommended as hypnotics, since they take up water, yielding aldehyde.

#### Some Different Amido Derivatives.

There are a number of bodies in which the amido group does not play the principal part in the therapeutic effect, but assists materially in the production of more soluble compounds, and lessens the toxic effect of the body. Here we have the uric-acid solvent, piperazin:

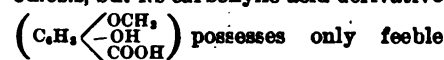


As an antiseptic, we have hydroxylamine,  $\text{NH}_2-\text{OH}$ , the hydrochlorate of which forms a substitute for pyrogallol acid and chrysarobin. Mercurial antiseptics containing the amido group are mercurous formamide ( $\text{HCONH} > \text{Hg}$ ) and ( $\text{C}_2\text{H}_5 < \text{CO} > \text{N}-\text{Hg}-\text{N} < \text{CO} > \text{C}_2\text{H}_5$ ) succinimid mercury. As an amido-salol, we have salophen (para-aceto-amido-phenyl-salicylic-ester). From what we have thus far seen of the amido group, it is evident that a satisfactory explanation of its therapeutic significance is scarcely possible, considering the present state of our knowledge.

#### Influence of the Carboxyl and Sulfonic Acid Groups on the Toxic Properties of Organic Compounds.

Erdmann's investigations have shown that the antipyretic derivatives of para-amido-phenol, as phenacetine and phenocoll are rendered totally inert, when rendered soluble by the preparation of their carboxylic and sulfonic acid derivatives. Further, the introduction of these groups into other antipyretics has demonstrated the same fact. Bodies of well defined toxic properties suffer a marked diminution of action by the introduction of these groups. This observation is of the greatest value from a hygienic standpoint in the coal-tar industry, for the introduction of these groups into the aniline colors, thereby rendering them inert, removes the objection to their employment as coloring agents for candies, food products, etc. These bodies, on entering the system, are split up into their various constituents or compounds; now the chief cause of poisoning is to be found in these reduction phenomena; so in this case a lessening of toxic effect may be explained in that the carboxyl ( $\text{COOH}$ ) represents a group saturated with oxygen, which is no further reduced in the organism. Naphtalin, pyridin and chinolin are toxic; their corresponding carboxyl derivatives are far less so. The introduction of the  $\text{COOH}$  group into acetanilid (malon-anilic acid,  $\text{C}_6\text{H}_5\text{NH}-\text{CO}-\text{CH}_2-\text{COOH}$ ) yields an inert compound. While the phenols show strong toxic properties, this is considerably lowered or sometimes entirely lost in their carboxylic and sulfonic acid derivatives. Guaiacol ( $\text{C}_6\text{H}_3 < \begin{matrix} \text{OCH}_3 \\ \text{OH} \end{matrix}$ ) is of the greatest value in treatment of tuber-

culosis, but its carboxylic acid derivative

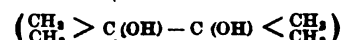


antiseptic properties.

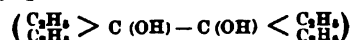
It has been found that those bodies which exert a powerful action upon the nervous centers lose this action entirely in their sulfonic acid derivatives. This has been borne out in the alkali salts of caffeine sulfonic acid (nasrol or sodium sulfocaffeate), having lost their effect on the vasomotor center, while the diuretic effect is retained.

#### NARCOTIC EFFECTS OF THE ALCOHOLS.

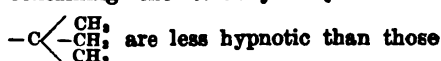
The primary alcohols are less narcotic than the secondary, and these less so than the tertiary. In the tertiary alcohols, the medicinal action depends upon the nature of the alcohol radical, which is united to the tertiary carbon atom. With the radical  $\text{CH}_3$ , present, as in tri-methyl-carbinol (tertiary-butyl alcohol ( $\text{CH}_3)_3\text{C}-\text{OH}$ )) the action is relatively feeble; with the introduction of ethyl groups ( $\text{C}_2\text{H}_5$ ), it increases in ratio to the number of such groups united to the tertiary carbon atom. The same may be said of the pinacones; thus methyl-pinacone



is no more narcotic than ethyl alcohol, but this action is more marked in methyl-ethyl pinacone and still more so in di-ethyl-pinacone



Ureas containing one or more substituted alcohol radicals possess no narcotic action; however, we find the contrary to be the case in those which contain a tertiary alcohol radical; here the rule that an ethyl united with the tertiary carbon atom is more active than methyl, takes effect. For this reason those ureas containing the tertiary butyl radical



containing tertiary amyl:  $-\text{C} < \begin{matrix} \text{C}_2\text{H}_5 \\ \text{CH}_2 \\ \text{CH}_3 \end{matrix}$

#### RELATION BETWEEN CHEMICAL COMPOSITION AND MEDICINAL ACTION.

In view of what has already been accomplished, there is but little doubt that a relationship between chemical constitution and medicinal action exists to a certain extent. This is evidently subject to several conditions, among the most important of which may be mentioned: The intra-molecular structural arrangement, the degree of solubility which regulates the more rapid or slower absorption in the system, various decompositions which these bodies undergo after entering the body, and the electrolytic conductivity of the compound.

#### DIURETIC PILLS.

Powdered squill.....grs. xxx  
Powdered digitalis.....grs. xxx  
Extract of colocynth.....grs. vj  
Extract of rhubarb, sufficient to make 50 pills.  
Dose—One to three pills morning and evening.

#### FOR TAN AND FRECKLES.

Rose water.....6 ounces  
Glycerin.....1/2 ounce  
Bitter almond water.....2 1/2 drams  
Tincture benzoïn.....2 1/2 drams  
Borax.....1 1/2 drams

Apply night and morning.





Erythrol Tetranitrite is a new substance which has been recommended as a substitute for nitroglycerin, in the treatment of diseases of the heart.

Calcium Sulphite has been recommended by Dr. Gelle as a prophylactic against influenza in doses of 0.06 gm. per day in pill form. Three days of treatment suffices to insure immunity.

The Use of Concentrated Decoctions and Infusions has been studied practically by Dr. Fried, who finds (*Med. Post.*) that the preparations made according to (German) pharmacopoeial directions are very much more active than those made by a dilution of concentrated infusions and decoctions.

The Value of Ergot does not depend, says Beckurts, on the size and external appearance of the drug, the smaller sized ergot really being preferable to the larger, since it contains a larger proportion of cornutin than does the larger fungus. In the samples examined by Beckurts the largest proportion of cornutin was found in Austrian and Russian ergot; while that of German and Spanish origin contained a much smaller quantity.

Kresochin is a preparation which has been introduced by a Hamburg firm for use in disinfecting instruments, and consists, according to the manufacturers (*Pharm. Central*), of a combination of tricresol—sulfonic acid and chinolin. Kresochin has the appearance of the well-known soap-cresol solutions, but it does not contain any alkalies, while both the chinolin and the tricresol are present in a condition which makes them of the greatest bactericidal value. The preparation does not make the hands slippery, it is not corrosive, does not irritate and is soluble up to 25 per cent. in any water, even though it be a very hard water.

Hæmol Bromide is a preparation which, according to Kobert (*Central Blatt f. Nervinkr.*) does not produce the disagreeable secondary effects which accompany the use of other bromine compounds. It contains a smaller proportion of bromine than do the inorganic salts, and is, therefore, recommended only as a mild sedative, particularly in neuroses in which, on account of epilepsy, no good results are obtainable from the ordinary bromides. It has been used by Holst in doses of 2 gm. daily with excellent results in hysterical cramps and insomnia. The half of this dose is sufficient to produce a merely sedative effect. Hæmol bromide is particularly valuable in hysteria, while in neuralgia it acts merely as a sedative, but not as an anodyne.

The Preparation of Fowler's Solution.—According to Benysek (*Pharm. Zeit.*)

Fowler's solution is damaged by exposure to light and air, the result being a decided loss of arsenic oxide, but this loss can be largely retarded by the addition of alcohol. The author says, however, that it is much better and more practical to prepare a solution which instead of being alkaline is exactly neutral, and for this purpose he recommends the method proposed in 1894 by Lonne, which is as follows: Dissolve 1 gm. of arsenic oxide by the aid of heat in 10 ccm. of normal potassa solution; when cold add 40 gm. of distilled water, 10 ccm. of normal hydrochloric acid and 50 gm. of spirit of melissa, or any other desired flavoring, and finally bring the whole up to 100 gm. by the addition of distilled water.

Acetic Acid in the Preparation of Narcotic Extracts.—Benysek has investigated the method of preparing narcotic extracts, and according to his experience, extracts can be prepared (*Chem. Zeit.*) by the use of diluted acetic acid as a menstruum which contain a larger percentage of alkaloid and at the same time the drugs yield a larger proportion of extract than when alcohol is used as a menstruum. He finds, however, that the extract when prepared by the use of acetic acid is more prone to decomposition than when alcohol is used. The proportion of alkaloid contained in the extracts prepared from drugs gathered in the fall showed no marked variation from that in extracts from drugs gathered in the summer. A decided influence is exerted, however, by the character of the soil in which the plants are grown, as plants grown in a poor soil yielded about one-third less of extract, containing 0.18 to 0.4 per cent. less alkaloid than the same plants when grown on a rich soil.

The Preservation of Drugs.—F. Miehle gives the following practical points on the methods of keeping drugs so as to avoid deterioration. He advises (*Apoth. Zeit.*) that it is not only necessary to preserve the various juices and liquid preparations in small bottles, but that narcotic extracts, saccharated iron iodide and similar easily decomposable substances should be preserved in well filled air tight receptacles and kept in a cellar. Very hygroscopic substances, such as monochloroacetic acid, iron bromide, sodium nitrite, zinc iodide, etc., are best preserved in closed vessels over burnt lime in a so called cold drying closet. This is also recommended as regards the storing of gum resins. Spread plasters containing vegetable substances which easily become moldy in the cellar should be kept in a dry store room. Soaps should be carefully separated in a store room from other stock. The author also recommends that all odoriferous drugs should be kept in tin cans.

Utilization of Roentgen Rays in Examination of Vegetable Substances.—Fernand Ranwez (*Comptes Rendus*) directs attention to the fact that Roentgen rays can be utilized in analytical examinations, more particularly in the examination of vegetable food stuffs, since by their aid the presence of any mineral can be discovered quickly, accurately, and without affecting the sample under examination. Furthermore, a number of tests can be conducted simultaneously, and the results are such as will be easily comprehended by the laity. Ranwez examined three specimens of commercial saffron, which had been adulterated by adding barium sulphate so that the filaments were partly coated with the mineral substance; the adulteration had been very carefully carried out, and was not noticeable to the naked eye. One sample contained 22.21 per cent. of adulterant, the second sample contained 28.69 and a third 62.18 per cent. of the mineral substance. Roentgen skotographs of the adulterated saffron made very clear pictures, while the skotographs of the pure saffron, under the same exposure, showed scarcely discernible shadows.

Roentgen Rays and Precious Stones.—Buguet and Gascard's observations on the possibility of distinguishing diamonds and jet from many of their imitations by the application of the X-rays are already well known. The transparency of aluminum to the rays has since led them to study the effects produced in the case of precious stones of which that metal is a constituent. They find that the crystalline forms of alumina known as the corundum, ruby, sapphire, emerald, topaz, and cat's-eye may be classed between their imitations and the diamond with regard to the effect produced. The turquoise, which consists of aluminum phosphate, is also clearly distinguished from its substitutes by means of the rays, and mellite is almost as transparent as carbon. Fine pearls of small size are less opaque to the rays than false ones of the same size, and may be clearly distinguished from them; but in the case of larger specimens the result is less certain, depending greatly upon the manner in which the false pearls have been made (*Comp. Rend.*).

Composition of Scopolamine Hydrobromide.—O. Hesse has recently published a note on hyoscyne, atropine and commercial scopolamine hydrobromide (*Apotheker Zeitung*) in which, after reviewing the various conflicting statements concerning the identity of these substances, he announces the following conclusions: 1. Commercial scopolamine hydrochloride is essentially a varying mixture of hyoscyne and atropine hydrobromide. 2. The hyoscyne present is identical with the hyoscyne of Ladenburg ( $C_{17}H_{21}NO$ ). 3. The atropine is an isomer of the hyoscyne, but is not formed from the latter by the action of potassa or soda, or potassium or sodium carbonate or calcium hydrate or silver oxide. 4. The atropine possesses properties different from those ascribed to the so-called iso scopolamine described by E. Schmidt (*Archiv. der Pharm.*, 1894, 232, 393). 5. Atropine hydrobromide has a materially different action from that ascribed to pure hyoscyne hydrobromide (the strongly rotatory scopolamine hydrobromide of E. Schmidt) by Uthoff and Axenfeld, and also from that of the weakly rotatory scopolamine hydrobromide.

## The Future of the Tablet Triturate.

**The Future of the Tablet Triturate Sketched by Dr. Payne of Atlanta—Will It Go The Way of the Homœopathic Pellet?—A Possible Source of Self-Medication by the Pill-Taking Public—Tablet Triturates Deteriorate Rapidly—A Fad of the Medical Profession Which Has Had Its Day.**

*The Committee on Pharmacy and Queries of the Georgia State Pharmaceutical Association recently invited Dr. Geo. F. Payne of Atlanta to prepare a paper embodying his views on "The Future of the Tablet Triturate," and the interesting and instructive paper which follows is the result. The paper was read to the Association at the annual meeting held in Atlanta, May 6, 1896.*

THE tablet triturate is now with us in its many variations as an established fact. As to its future it is difficult to prophesy, except upon the general ground that all fads have their day and pass away among the have beens.

### THE TABLET TRITURATE A PROBLEM.

There are many good points in favor of this method of rendering drugs portable; there are also some excellent reasons against their too general use. Pharmacy is to-day confronted with a number of problems. We may consider the tablet triturate one of them, yet it is really a more serious problem to the medical man. There is a demand for tablet triturates and the pharmacist is bound to supply them. As to their future, we believe that the medical profession will soon grasp the serious bearing they have upon their practice, and will curtail their use. Their great convenience renders them almost a boon to the physician; their portability and ready administration enables the physician to carry an assortment of remedies to meet nearly all cases. Their very convenience and attempt to supply all demands leads the physician into using them in cases in which they are far from suited.

### LIMITATIONS OF THE PHYSICIAN IN PRESCRIBING TABLET TRITURATES.

We are all aware that in disease the assimilation of drugs is usually far less active than with a healthy organization. We know that many drugs pass through the alimentary canal of the diseased unchanged. In a healthy subject most of the tablet triturates will answer their therapeutic intentions, but in torpid conditions of the stomach their use is often inadequate to bring about the results desired. It is advisable, as far as possible, to administer each drug with its appropriate solvent, but in the case of the tablet triturate water is the only solvent used, and in many cases it is not a solvent at all, or only a very slight one.

### LIMITED TO SUGAR OF MILK AND WATER.

For prompt, ready effect in serious cases it is important that many of those drugs which are not soluble in water should be given in their proper solvents. This is usually done by the medical practitioner by writing appropriately proportioned prescriptions for the same, but in a tablet triturate he is limited to sugar of milk and water as his only adjuvants.

### DOES THE TABLET TRITURATE FOSTER SELF-MEDICATION?

Among the human race there seems to be a well established propensity to take pills, and what some people can stand in the way of this kind of self-medication is perfectly marvelous. The tablet triturate, which can be so easily used as a

pill, is now widely exploited by the medical fraternity. Almost every conceivable formula is made up by the manufacturing pharmacist, that wonderful, scientific man, who divides the profits of the physician and the pharmacist.

From a fad with the physician, we think by infection the tablet triturate will soon become a fad or habit with the people, and a fruitful source of self medication. We naturally suppose that in the course of the evolution of the tablet triturate, it will follow somewhat that of the homœopathic pill. We believe that some of the manufacturers will eventually begin to issue little pamphlets entitled "Every Man His Own Doctor,"\* giving the symptoms and allowing each man to make his own diagnosis, and then directing him which prescription to use from his family medicine chest of tablet triturates.

### DETERIORATION OF TABLETS.

We know that some remedies do not keep well in the form of tablet triturates; in fact, we positively know that some undergo a change. This, however, could be urged against many preparations in other forms which are kept any length of time. We feel that the tablet triturate is simply a form of medicine which the pharmacist is now bound to supply, and with which at present the physician is much impressed. The future of the tablet triturate might be a very contracted one if left to the final decision of the practicing physician, but we believe that after the manufacturing pharmacists find that the physicians are falling off in their use of remedies of this form they will more widely advertise them before the public, in handy medicine cases if necessary. We all know how the pill business has grown, and the tablet triturate we think is also destined to grow into still larger use. The physicians have honored the tablet triturates, and the public will soon bow down and worship them also. The pill taking habit may simply change into a fad for tablet triturate self medication. A physician told us some time ago that the manufacture of ready made pills, particularly of compound cathartic pills, had ruined his practice, as his patients, or those who should have been his patients, for miles around, constantly sent to him for a dose of compound cathartic pills instead of calling for his professional services. The thing grew upon him by his selling these pills before he was aware of the damage it did his practice. Finally he ceased selling compound cathartic pills, but the country stores kept up their supply, re-

\*[This is now an accomplished fact, a tablet triturate manufacturer having organized in New York City "The Home Remedy Company," for the treatment of disease by tablet triturates.—ED.]

gardless of his wishes in the matter. Compound cathartic pills are very effective, as we all know, particularly upon those who are comparatively well, yet as an illustration of what compound cathartic pills do not do sometimes, in which they probably compare with some kinds of tablet triturates, a little boy was sent by his mother to the drug store to get a box of sugar coated compound cathartic pills. The youngster found on opening the box as he wended his way homeward that the pills were sugar coated and eat up the whole box of pills, at least he insists that he did so until this day. If such was really the case, those compound cathartic pills must have deteriorated fully as much as any tablet triturate could have done, or that boy lied.

### WILL PHARMACISTS TURN DOCTORS?

Many physicians welcome the tablet triturate as enabling them to dispense to their patients on an extensive scale. The future of this feature of the case appears to be that pharmacists will graduate as physicians and prescribe, meeting the inroads made into their business by the physicians by making a counter inroad into the territory of the practitioner. This would be an unfortunate condition of affairs, as we desire a better fellowship between physicians and pharmacists and not a clash of interests.

### Will Conferring the Degree of Doctor of Pharmacy tend to Elevate the Profession of Pharmacy?\*

BY HENRY R. SLACK, PH.M., M.D.,

Secretary Georgia State Board of Pharmacy, La Grange, Ga.

Before beginning the consideration of a doctor's degree in pharmacy, it may be well to consider briefly the historic evolution of the doctor.

The word is derived from the Latin *docere*, to teach, and was originally used, in accordance with its etymological derivation, to signify a teacher. We read in the New Testament of Christ "sitting in the midst of the doctors, both hearing them and asking them questions" (Luke 2:46), and again of "Gamaliel, a doctor of the law" (Acts 5:34). These men were teachers, and it was not until the twelfth century that doctor began to be used as a title of honor for the learned.

### EARLY SIGNIFICANCE OF THE TITLE "DOCTOR."

In these early days it frequently had added to it some additional expression intended to characterize the peculiar gifts of its possessor; thus, Roger Bacon was dubbed the Doctor Mirabilis; Duns Scotus the Doctor Subtilis; William Occam the Doctor Singularis, etc. The University of Bologna, in the twelfth century, under the sway of the learned Irnerius, began to confer the degree of doctor of laws. Paris soon followed with doctor of divinity, and Salerno with doctor of medicine. The German universities extended it to doctor of philosophy, and the University of London to doctor of science. In Oxford and Cambridge, also in some of the German universities, the degree of doctor of music has recently been conferred. To

\*Read at the annual meeting of the Georgia Pharmaceutical Association.

Baltimore belongs the honor of making the first doctor of dental surgery. It is to be observed, in all the doctor's degrees except the last, that the bachelor's or master's degree was a pre-requisite.

Because the doctor's degree represented a prolonged course of study and careful preparation, it has added dignity both to its possessor and his profession. Unless, however, it does represent this course of thorough training, it is an empty title and carries with it no honor.

#### CONFERRING THE DEGREE WITHOUT PROPER TERMS OF STUDY.

No thoughtful observer will for a moment claim that the promiscuous conferring of the degree of doctor of medicine on half trained young men by so many colleges has elevated the medical profession. On the contrary, the dignity of the profession was so imperilled that the American Medical Association had to take some steps to protect it from the diploma mills, by refusing recognition to their graduates unless they gave more and better instruction.

The dentists soon detected the error of conferring a doctor's degree upon the completion of a two years' course of study, and, be it said to their credit, extended it to three before the American medical colleges had acted.

Now, the experiment of conferring the doctor's degree upon those who had taken no bachelor's degree, or its equivalent, has been tried in the ancient and honorable profession of medicine, and in the young and progressive profession of dentistry, and in both proved hurtful.

If true in acknowledged professions, how can an honorable occupation, fighting for professional recognition which it deserves, afford to repeat an experiment that has been demonstrated a failure? Of what use is the study of history if we are not to profit by the experiences of the past?

I favor conferring the degree of doctor of pharmacy, for it will proclaim to the public in no uncertain tones that the pharmacist recognizes and is willing to assert his claims to professional recognition; but let that degree represent more than merely two or three years' professional training.

#### REQUIREMENTS FOR THE DOCTORATE DEGREE.

The doctor of pharmacy should have a good preliminary education, at least a high-school course, be a graduate in pharmacy, a pharmaceutical chemist, or a bachelor of pharmacy, who has had one or two years' post-graduate work in well equipped chemical, pharmaceutical and microscopical laboratories. I hold, too, that he should have practical training in a drug store, behind the prescription counter, and know how to wash bottles and tie up a neat package of salts, as well as understand the formulas and reactions in organic chemistry. For his doctorate he should prepare a thesis requiring independent work, original if possible.

It is not the intention of this paper to formulate a course of study for the doctor's degree in pharmacy. That must be done by teachers of large experience in schools already conferring pharmaceutical degrees. The formation of an Association of American Pharmaceutical Colleges to fix the curriculum "is a consummation devoutly to be wished," and would do much to elevate the standard of pharmaceutical teaching.

Such an association exists among the

medical colleges, and a committee on syllabus has just reported. This curriculum covers four years of six to eight months each, with a high-school education as a prerequisite. Already the Johns Hopkins requires a bachelor's degree and a four years' course of their doctors. Harvard, the universities of Pennsylvania, Michigan and others, are falling into line.

I hope at the coming meeting of the American Pharmaceutical Association in

Montreal enough colleges will be represented to form such an association, and by 1897 the committee will report in favor of conferring the degree of doctor of pharmacy. Let them not discard the old degrees of Ph.G. or Ph.C., but rather supplement them with a post-graduate course leading up to P.D. Then will conferring the doctor's degree tend to elevate the profession, because it will conform to historic precedent in the other learned professions.



*We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.*

*When sending for the formula of any unusual compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the labels used on packages of the compound should also be sent.*

**Raines Law Inquiries.**—J. G. writes: I see that you continue to inform your readers that druggists can sell alcohol without taking out a liquor tax certificate. You are mistaken in this. The new excise law plainly says that the term liquors shall mean all *distilled and rectified spirits*. This includes alcohol, under the section of the bill prescribing the fee for a pharmacist's liquor certificate, which permits a druggist to sell liquors on *prescription only*. There is an exception which permits alcohol to be used *without a prescription*. The putting in of this last clause clearly emphasizes that alcohol comes under the term liquors as defined in the bill.

This is our correspondent's interpretation of the law. No authoritative ruling upon the question at issue has yet been announced by the Commissioners of Excise. As for the AMERICAN DRUGGIST, it has never informed its readers definitely that druggists can sell alcohol under the new liquor tax law without taking out a liquor tax certificate. It is our impression, however, that they may.

**Valuation of Carbolic Acid.**—M. P. W. —A process for estimating the value of a given sample of carbolic acid is official in the Pharmacopoeia. An alternative method, which varies only in trifling details, and is, like the pharmacopoeial test, based on Köpkeschaar's process, is as follows:

Disolve 0.783 gm. of carbolic acid in a sufficient quantity of water to make 100 ccm. By means of a pipette, transfer 20 ccm. of this solution (containing 0.1566 gm. of the acid) into a bottle of the capacity of, about 250 ccm., provided with a glass stopper, and add 50 ccm. of bromine U. S., then 5 ccm. of pure hydrochloric acid, and immediately insert the stopper. Shake the bottle thoroughly during several minutes, until no further

change of tint is observed in the contents then remove the stopper just sufficiently to quickly introduce 5 ccm. of potassium iodide T. S., immediately insert the stopper again and shake thoroughly. (If the contents consist, now, of a white flocculent precipitate—tribromophenol—and a colorless liquid, which is not rendered blue by starch T. S., the carbolic acid was absolute or of 100 per cent. in strength. This will, however, rarely be the case, the liquid possessing generally a more or less deep iodine tint.) Now remove the stopper, rinse it and the neck of the bottle with a little water, so that the washings flow into the bottle, and then add from a burette decinormal sodium hyposulphite U. S., until the iodine tint is exactly discharged, using toward the end a few drops of starch T. S. as indicator. Deduct the number of cubic centimeters of the sodium hyposulphite U. S., thus consumed, from 100. The remainder represents the percentage of absolute phenol in the carbolic acid examined.

**What's a Four per cent. Solution?** —W. H. M. asks: "What is a 4 per cent. solution? I have had various arguments with physicians lately on this subject and we fail to agree. Some say that a grain being equal to a minim, it takes 4 grains of a salt to 96 minims of liquid to make a 4 per cent. solution. Others argue that it takes 4 grains to 100 minims to make a solution of this percentage salt. Kindly give me your opinion and substantiate it by some other recognized authority. The point is causing considerable argument here in Florida. Of course it matters not whether we want a 4 per cent., 8 per cent., 2 per cent. or any other per cent. in solution. The question is as to whether or not we are to deduct the grains as representing minims from the solution or not."

It should not be necessary at this late day to remind either pharmacists or physicians that a grain of a solid does not occupy the same space as a minim of fluid, and that 4 grains of a salt dissolved in 96 minims of solvent will not yield a 4 per cent. solution. A 4 per cent. solution is one that contains four parts of the drug or salt in every 100 parts of solution. The parts taken must be based either on weight or volume, and technical usage indorses the first method. To make a fluid ounce of a 4 per cent. solution of any salt, we first calculate the weight of this quantity of solvent. A fluid ounce of water weighs approximately 456 grains (U. S. P. 455.7 grains); 4 per cent. of 456 = 100 : 4 :: 456 : 18.24. Subtracting 18.24 grains from 456 grains, we get 438 grains, in which to dissolve the chemical. To prepare exactly 1 fluid ounce of a 4 per cent. solution, we take the nearest round number to the weight of a fluid ounce of water, which is 500; 4 per cent. of 500 is 20. Calculating as above, we dissolve 20 grains of the chemical in 480 grains of water, which gives

We should not advise any one to make calcium tungstate, as its preparation is very difficult. The salt is made by fusing together sodium chloride, sodium tungstate and calcium chloride in atomic proportions. The calcium takes up the tungstic acid, sodium chloride being the other product of the double decomposition. Treatment with water dissolves out the sodium chloride and leaves the insoluble crystals of calcium tungstate; the fusion is done in an incandescent lamp filament furnace at a white heat. The crystals are dried and sifted; such as go through a No. 80 mesh are the coarsest used. The crystals are attached to the screen of the fluoroscope. It will be seen from the above that the preparation of calcium tungstate is difficult, and it may be found more satisfactory to purchase the salt from some dealer. It can be had from Ricketts & Banks, 104 John street, this city, and others.

Syrup of Camphor.—F. J. Kilner, dispenser to the Bristol Royal Infirmary, Bristol, England, communicates the fol-

#### FOR MAKING ANY QUANTITY OF PERCENTAGE SOLUTIONS.

To Make—	For each 1 fluid ounce of water take of the drug or salt—	For each 2 fluid ounces of water take of the drug or salt—	For each 3 fluid ounces of water take of the drug or salt—	For each 4 fluid ounces of water take of the drug or salt—	For each 5 fluid ounces of water take of the drug or salt—	For each 10 fluid ounces of water take of the drug or salt—	For each 16 fluid ounces of water take of the drug or salt—
Grains.	Grains.	Grains.	Grains.	Grains.	Grains.	Grains.	Grains.
1 per cent.....	4.557	9.114	13.671	18.228	22.785	45.57	72.912
2 per cent.....	9.114	18.228	27.342	36.456	45.570	91.14	145.824
3 per cent.....	13.671	27.342	41.018	54.684	68.355	136.71	218.736
4 per cent.....	18.228	36.456	54.684	72.912	91.14	182.28	291.648
5 per cent.....	22.785	45.57	68.355	91.14	113.925	227.85	364.56
10 per cent.....	45.57	91.14	136.71	182.28	227.85	455.7	729.12
15 per cent.....	68.355	136.71	205.065	273.42	341.775	683.55	1093.68
20 per cent.....	91.14	182.28	273.42	364.56	455.70	911.4	1458.24
25 per cent.....	113.925	227.85	341.775	455.70	569.625	1139.25	1822.80
40 per cent.....	182.28	364.56	546.84	729.12	911.4	1822.80	2916.48

us a little more than a fluid ounce, the excess being thrown away or kept for future use, as deemed best.

The accompanying table from a back number of the *New Idea* will be found useful for ready reference: It is used as follows: Run down column 1 until the correct percentage wanted is found, then move to the right along the line until the column is found giving the amount of fluid measure to be made up; at the intersection will be found the weight of salt required. For example, suppose it is desired to make 4 fluid ounces of 4 per cent. cocaine muriate solution; run down the left hand column to 4, then along the right till we reach the column headed 4 fluid ounces. At the intersection of the two will be found 72.91, and this is the number of grains needed. It must be remembered that this is the amount of water to take, and not q. s. water to make the volume. Also that these tables are true only for water, and not for alcohol or other fluid.

Manufacture of Calcium Tungstate.—E. P. F. writes: Can you or some of your readers tell me through Queries and Answers in what proportion sodium tungstate, calcium chloride and sodium chloride are mixed to produce calcium tungstate (and sodium chloride as a by-product), and to what temperature the compound must be subjected in order to effect the combination?

lowing formulas to the *Pharmaceutical Journal*:

#### SYRUPUS CAMPHORÆ COMPOSITUS.

℞ Acid benzoidi..... 3 iij  
Acid acetic glacialis..... 3 iij 3 v ℥xx  
Aceti scillæ B. P..... 3 xl  
Aceti ipecacuanhæ (B. P. additions)..... 3 xl  
Olei anisi..... 3 iij  
Camphoræ..... 3 iij  
Tincturæ opii. B. P..... 3 x 3 v ℥xx  
Sacchari albi (cryst.)..... 3 ss  
\*Sacchari usul..... q. s.  
Aque destillatæ..... ad Cong. iv  
Misce.  
3 j. fl. contains one minim of Tr. opii.  
Dose: One teaspoonful occasionally.

\*Sufficient to give the mixture the color of Tr. camphoræ Co. B. P.

### Student's Column.

#### Organic Materia Medica of the U. S. P.

(Concluded from page 222.)

#### Valeriana. Valerian.

BOTANICAL NAME... Valeriana officinalis.  
NATURAL ORDER... Valerianaceæ.  
HABITAT..... Europe and Northern Asia, cultivated in New England and New York.

CONSTITUENTS..... Volatile oil, chief constituent, 14-2 per cent.; crystalline glucoside, valerianic, formic and malic acids.

PROPERTIES..... Stimulant, antispasmodic, nervine.

PARTS USED..... The root.

Dose—Ext. fld., Tinct. and Ammon. Tinct. Co. 1-4.

#### Vanilla. Vanilla.

BOTANICAL NAME... Vanilla planifolia.  
NATURAL ORDER... Orchideæ.  
HABITAT..... Eastern Mexico, cultivated in some of the West Indian Islands.

CONSTITUENTS..... Vanillin, fixed oil, resin, sugar.

PROPERTIES..... Used chiefly as a flavoring agent; is carminative, stimulant, antihysterical and an aphrodisiac.

PARTS USED..... The prepared unripe fruit.

Dose—0.2-2 Gm.

#### Veratrum Viride. Veratrum viride, green hellebore, Indianpoke.

BOTANICAL NAME... Veratrum viride.  
NATURAL ORDER... Liliaceæ.  
HABITAT..... North America, from Canada south to Georgia.

CONSTITUENTS..... Resin, starch and alkaloids. Alkaloids are: Jervine, veratroidine, pseudojervine, rubijervine, cevadine.

PROPERTIES..... Cardiac sedative, diaphoretic, emetic and errhine.

PARTS USED..... The rhizome and rootlets.

Dose—Ext. fld., Co. 0.05-0.15; Tinct. 0.40-0.50.

#### Viburnum Opulus. Viburnum opulus, cramp bark.

BOTANICAL NAME... Viburnum opulus.  
NATURAL ORDER... Caprifoliaceæ.  
HABITAT..... Northern United States, Canada, Europe and Asia.

CONSTITUENTS..... Valerianic acid, viburnin.

PROPERTIES..... Antispasmodic, uterine sedative.

PARTS USED..... The bark.

Dose—Ext. fld., Co. 4-8.

#### Viburnum Prunifolium. Black haw.

BOTANICAL NAME... Viburnum prunifolium.  
NATURAL ORDER... Caprifoliaceæ.  
HABITAT..... United States, westward to Kansas and Mississippi.

CONSTITUENTS..... Valerianic acid, resin, bitter principle, tannin, sugar, oxalates.

PROPERTIES..... Diuretic, tonic, nervine, uterine sedative.

PARTS USED..... The bark.

Dose—Ext. fld., Co. 4-8.

#### Vitellus. Yolk of egg.

ZOOLOGICAL NAME... Gallus Bankiva var. domestica.

ORDER..... Galline; class—Aves.  
HABITAT..... Java and Cochín China, domesticated.

CONSTITUENTS..... Water, 48-55 per cent; vitellin, 16; fat, 30; inorganic salts and cholestrin, coloring matter.

PROPERTIES..... Nutritious, externally protective to the skin; emulsifying agent in pharmacy.

#### Xanthoxylum. Prickly ash; toothache tree; angelica tree, suterberry.

BOTANICAL NAME... Xanthoxylum Americanum.

NATURAL ORDER... Rutaceæ.

HABITAT..... North America.

CONSTITUENTS..... Acid oil, resin, bitter principle.

PROPERTIES..... Sialagogue, stimulant, alterative, emmenagogue.

PARTS USED..... The bark.

Dose—Ext. fld., Co. 2-4.

#### Zingiber. Ginger.

BOTANICAL NAME... Zingiber officinale.

NATURAL ORDER... Scitamineæ.

HABITAT..... India.

CONSTITUENTS..... Volatile oil, 1-2 per cent; gingerol, resin, starch.

PROPERTIES..... Carminative, stimulant, anodyne.

PART USED..... The rhizome.

Dose—Ext. fld., Co. 0.05-1; Tinct., Co. 0.05-2.

## Examination Questions of the California Board of Pharmacy.

SPRING SESSION, 1896.

Written Examination of Applicants for Registration.

### Practical Pharmacy.

S. H. MELVIN, Examiner.

Write following prescriptions and directions in English, giving quantities in troy (omitting fractions). If a chemical change or reaction would ensue by union of two or more of the constituents, describe the same, and state whether, in your opinion, the therapeutic value of the prescription would be impaired or otherwise, and why.

You are also requested to point out incompatibilities or improper doses, if such are found, and in the latter case, state what the average dose should be.

No. 1. B.	Fl. ext. secale cornutum.....	16
	Fl. ext. gossypii rad.....	12
	Ol. sabini.....	8.0
	Syr. croci.....	
	Aquae menth. virid. ad q.s.....	128

Misce.

Sig. Capiat coch. mod. ter in die.

No. 2. B.	Morph. acet.....	0.8
	Lactucar. pulv.....	0.6
	Ext. digitalis pulv.....	0.4
	Lupulini pulv.....	1.0

Misce et. div. chart. No. 10.

Sig. Capiat coch. mod. ter in die.

No. 3. B.	Camphora pulv.....	1.0
	Opil pulv.....	0.6
	Chloral hyd.....	0.8
	Saponis duri pulv.....	1.0

Misce et. div. chart. No. 12.

Sig. Capiat unum pulv. omni nocte.

No. 4. B.	Tinct. physostig.....	ss.....16
	Tinct. nuc. vom.....	12
	Fl. ext. can. indica.....	12
	Infus. cinchona flav. as q.s.....	64

Misce.

Sig. Coch. parv. ter in die.

No. 5. B.	Ext. belladon.....	6
	Morph. sulph.....	8
	Cocaine hydroch.....	0.4
	Ol. theobroma.....	24

Misce. Sec. art. et fiat suppositoriae No. 13.

Sig. Unum adhibendus omni nocte.

No. 6. B.	Quinine sulphatis.....	2
	Strychninae sulphatis.....	0.4
	Ferri phosphatis.....	1.0
	Potassi iodidi.....	12
	Aquae amygdalis amara.....	ss.....128
	Syr. simplex ad q.s.....	

Sig. Coch. parv. ter in die.

No. 7. B.	Peppermint lam.....	2
	Acid hydroch.....	4
	Liq. pot. arsenitis.....	3
	Tr. nuc vom.....	4
	Eliz. aurantii ad q.s.....	128

Sig. Coch. mod adhibendus omni bis in dies post cibum.

No. 8. B.	Calcii hypophos.....	ss.....4
	Sodii hypophos.....	
	Ferri pyrophos.....	
	Acid. citric.....	
	Strychninae sulp.....	0.6
	Syr. roseae gallici.....	128

Misce.

Sig. Coch. parv. ter in die post. cibum.

No. 9. B.	Ferri sulph. exic.....	3.5
	Acid. gallic.....	2.8
	Acacie mucil.....	32
	Aquae anisi ad q.s.....	128

Misce.

Sig. Capiat coch. mod pro re nata.

No. 10. Write a formula for 3ij solution containing 4 per cent. cocaine, giving figures showing how you ascertain the number of grains of the drug necessary.

### Pharmacy.

J. W. WOOD, Examiner.

1. From what is chloroform prepared? What is spirits chloroform? Chloric ether?

2. What is precipitated chalk chemically, and how prepared? How is prepared chalk made?

3. Copaiba—What is it? From what obtained? What change results in mak-

ing copaiba mass? What reaction has it with alkalis?

4. What is the source and dose of the following: (a) Eserine, (b) daturine, (c) apiol, (d) sparteine, (e) elaterin.

5. What is diastase? For what purpose is it used medicinally?

6. What is grape sugar? How is it usually prepared and in what important particulars does it differ from cane sugar?

7. How much absolute HCl is contained in the official acid hydrochloric? In the diluted acid?

8. What is meant by proof spirit? Diluted alcohol? What is the usual per cent. alcohol (by gravity) in whisky? In sherry? In port?

9. What is Donovan's solution and its dose? What is spts. mindererus? Its uses and dose?

10. What is the official name for the following: (a) Kermes mineral, (b) carbolic acid, (c) crocus sat., (d) crocus martius—(e) liver of sulphur.

### Chemistry.

J. H. FLINT, Examiner.

No. 1. (a) In what condition in nature do elements usually occur? (b) Describe the difference between the atomic weight and the valence of an element.

No. 2. (a) Give the symbols of iron, copper, antimony, magnesium and lead. (b) Mention an official preparation of each.

No. 3. (a) Write the formula of ferric chloride, ferrous chloride, mercuric chloride, mercurous chloride. (b) Give the common name of each.

No. 4. (a) State from what source sodium bicarbonate is obtained and give the percentage required by the U. S. P. of 1890. (b) Write the chemical formula of sedlitz powders and give the quantity of sodium bicarbonate contained in one powder.

No. 5. (a) What is borax and where and how obtained. (b) How may boric acid be disengaged from borax, and what is the solubility of the acid in water?

No. 6. (a) From what source is ammonium obtained? (b) What percentage of the gas by volume is contained in the ammonium hydrate, U. S. P. 1890? (c) Name three U. S. P. preparations and give the dose of each.

No. 7. (a) Write the chemical formula for the following: Sulphuric, muriatic, and nitric acids. (b) Sodium sulphate, zinc chloride, potassium chlorate.

No. 8. (a) If you mix a solution of potassium iodide with a solution of mercuric chloride what will be contained in the solution? (b) Give the test for mercuric chloride.

No. 9. (a) What acid would you use in cleaning a bottle that had contained lime water, and why? (b) What percentage of lime is held in solution in lime water?

No. 10. (a) From what and how is Fowler's solution made, what percentage of arsenic does it contain and what is the adult dose? (b) From what and how is Donovan's solution made, what percentage of the salt does it contain, and what is the dose?

### Materia Medica.

W. M. SEARBY, Examiner.

1. *Cannabis Indica*: What plant produces it and where is it grown? What part of the plant is it? How can you recognize it? To what constituents does it owe its medicinal properties? For what is it used? Give dose of solid extract and tincture.

2. *Copaiba*: What part of the plant is it and how is it obtained? From what countries does the best come? Of what is it composed? How can you detect adulterations of castor oil or gurgon balsam? Give use and dose.

3. *Spanish Saffron*: What plant produces it and what part is it? What is often sold for it and how can you detect it? What adulterations are at times found in it and how detected? Give official preparations and dose.

4. *Ergot*: What is it? How produced and on what plant? What constituents are supposed to give it medicinal value? What precautions should be observed with regard to its preservation? What is Bonjean's ergotin? Use and dose of ergot.

5. *Colchicum*: What parts are official? Name its active principles. Name the official preparations with strength of each.

6. *Podophyllum*: Give English name, part used, and habitat. Name its active principles. Name its medical properties. Give official preparations and dose of each.

7. *Lanoline*: What is it? Give its pharmacopoeial name? How does it differ from other fats, and why is it preferred to other fats in some cases?

8. Name the drugs of which the following are constituents: Emetine, eserine, santonine, creosote, piperine, salicin, hydrastine, pelletterine, apiol, gadnol.

9. Give doses and uses of the following: Antipyrine, salol, sulfonal, phenacetine, phenol, iodoform, piperazin, terebene, terpene hydrate, guaiacal.

10. *Catnep*: What part of the plant is used? What is its active principle? For what is it used? Dose.

### Toxicology.

H. J. FINGER, Examiner.

1. What is the average dose of aconitine? What part of the plant of *aconitum napellus* is the most active?

2. Name the principal active constituents of opium. How much opium should good laudanum contain?

3. What per cent. of phosphorus exists in bones? What are the poisonous effects of phosphorus? What emetic should always be used, and why? What is formed by its use? To what class of poisons does phosphorus belong?

4. What two alkaloids are contained in nuxvomica? How would you distinguish them by chemical means?

5. How is oxalic acid made on a large scale? What is the proper antidote for poisoning by oxalic acid? What is formed by its use? Why should alkaline carbonates not be used as antidotes in cases of poisoning by oxalic acid?

6. What are the symptoms of poisoning by antipyrine? From these symptoms state what class of remedies should be given to offset these symptoms.

7. How is apomorphine prepared? What are its uses in medicine?

8. How is chloral made? What are its poisonous effects, and what is the proper remedy in cases where an overdose of chloral has been taken?

9. Why are atropine and morphine used, one to offset the poisonous effects of the other? What are the effects of each on the circulation?

10. For what poison is the white of egg a proper antidote? How much of the poison will the white of one egg offset? Is it a chemical or mechanical antidote? If chemical, state what is formed by its use.





## Advertising Aid, how, when, and where to Advertise.

PRACTICAL HINTS AND SUGGESTIONS. CRITICISM AND CONSTRUCTION OF ADVERTISEMENTS.

In Charge of Ulysses G. Manning.

The department editor will be pleased to criticize any advertisements submitted and to suggest improvements. Questions answered and advice given. Our readers are cordially invited to avail themselves of this help.

### ADVERTISING SODA.

**N**OTHING a druggist sells is more susceptible of profitable advertising than soda water. But there must be quality back of the advertising. You can't fool people and there is no use trying. When both drink and service are right the advertising is easy.

There can hardly be any doubt that good soda helps your general trade and that bad soda hurts it. For more reasons than one you should serve the best possible soda, or you should serve none at all. Serving good soda is usually a matter of caring. Many don't care; they take no special interest in this feature of their business. If you don't care, or can't find clerks that care, better drop it.

There is usually one man in a town who gains a reputation for drawing the best soda. You ought to be that man. Good soda and good advertising will quickly build the reputation. If two men in a town are equally skillful in this line, and one persistently claims that his drink is the better and the other persistently keeps still, people will give the aggressive the benefit of the doubt and will soon be claiming just what he claims. I have seen some remarkable results from soda water advertising, but, wherever there have been results there has been a reason for them—good soda and careful service.

I believe in specialties at the fountain. Every druggist ought to have at least one drink that he believes to be better than anything else in town. He ought to push it persistently and aggressively. If he has no specialty he should select some distinctive feature of the business and talk that—cleanliness for instance. Keep people thinking about your fountain. There are plenty of things to tell them. If you are trying to serve the best possible soda, tell what efforts you make, what you are doing to make it best. If you really sell better soda than your

competitors, how is it better? If you know it, how do you know it? Tell why and how it is better. All the points about your fountain or service that could possibly have to do with the quality of the beverage are the things to be told. This is store news. It is what people like to read and is what sells goods. Circulars, folders, booklets and newspaper space can be employed in advertising your fountain.

As a rule, some sort of a circular that gives complete details and contains a list of drinks should be thoroughly distributed over your town and handed to patrons of the fountain. Soda is an exceedingly attractive subject for newspaper advertising. Hot weather is its powerful ally. Even bad soda advertising becomes good with the thermometer at 98 degrees.

### Criticism and Comment.

#### A SODA WATER CIRCULAR.

Connolly & Davis, Dorchester, Mass., submit a neat little folder that they have been distributing. It ought to bring results, for, while it is in part a general business announcement, it contains also an invitation to the public to come in and have soda water free on three special days. The circular is gracefully written and will create a good impression. The outside bears this sentence only: "See the treat inside for you," while the consecutive headings on the inside pages read as follows: "In Our District, We Will Give Our Soda Free." Free is a talismanic word in many quarters, though it does not appeal to the most desirable class of trade. However, free soda is offered in this case to patrons only, as an acknowledgment of past favors. The value of the circular will depend not so much on the acceptance of the invitation as on the favorable impression given those who may not avail themselves of it.

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#### DON'T GENERALIZE IN YOUR ADS.

Stockwell & Co., Greenville, Texas, send in specimens of their ads. for criti-

cism. They change copy twice a week, using a cut in each alternate ad. These ads. are only fairly good. They generalize too much. "The largest and best line of paints in the city. Our prices are as low as the lowest. We guarantee all the paint that we sell." This is the substance of one of the ads. It sounds too much like something we have read before.

An ad. of this kind falls short of the mark for two reasons. The phrases are trite, having been used so often as to lose all novelty and interest. There is no news in them; nothing to attract the reader to the ads. again. Even so prosaic a subject as paints presents effective talking points. The experience of every dealer will afford material for the best kind of ads. If a druggist pushes a certain brand of mixed paints, he usually knows why he does it. If it is because he believes the brand superior he ought to say so, and tell why he believes it superior. If he has had many years' experience in handling paints he should have learned something about them and he had better tell that. If I wanted paint and a dealer made the point that his experience would be valuable to me, I would be impressed by it. If I had confidence in him he would get my trade.

If a dealer really has the largest stock in town and wants people to believe it, more is required than the mere statement of the fact. Such generalities glance off like water from a duck's back. They are not specific enough. If a dealer has not the largest line in town, he had better not say it. It only affords a chance for possible comparison, which would be bad advertising. If he has the largest line there is some way he can prove it, and then his argument will have weight. If he carries 2, 5 or 10 tons of paints he can say that. If he can tell just how many pounds he has purchased for the season, so much the better. If he can impress people with the size of his stock the way is made smooth for what he has to say about prices; for people naturally suppose that large buying will enable him to sell closer than his competitor. If actual prices can be given his ad. has reached a fitting climax.

#### MOST ADVERTISING LACKS INFORMATION.

The main fault of nine-tenths of the retail advertising is that it lacks information. This is all the more remarkable because, reduced to its simplest features, advertising should be simply information—information on desirable goods, why they are desirable, where they can be found and what they cost. I presume many advertisers believe they are telling all that when they are not. The points that the purchaser most desires to know they leave for him to guess at. There is nothing that makes an ad. so readable as information. The American people want to know. They get a large portion of their education from the newspapers. Every scrap of real information is picked up with avidity. You can do nothing better to insure the reading of your ads. than to put information into them. The little petty and technical details of your buying and selling is all interesting to the uninitiated.

I see that a druggist out west is dissecting his fountain, telling how soda water is made, from the basement up. He does not fail to put in a good word for himself occasionally. I am sure that before he finishes his series he will have a large and attentive audience.

## MINERAL WATER ADVERTISING.

OMAHA, NEB.

MR. ULYSSES G. MANNING.

DEAR SIR: Noticing your remarks in issue of April 25, regarding the unexploited field for mineral water advertising, we take pleasure in inclosing a folder gotten out by ourselves a few weeks ago. How do you like it? We push the mineral water business. We also inclose a booklet which is one of a lot of 5,000 we are circulating just now. We put them in sealed envelopes and mail or send them by boy, according to distance.

SHERMAN & MCCONNELL DRUG CO.,  
By SHERMAN.

This mineral water circular is not exactly the kind I suggested in the issue of April 25. It would hardly pay a retail dealer to put out such a circular. It is the owners of the springs who ought to attempt to educate the public as to the value and uses of medicinal waters. For the purpose for which it was intended, I should think this circular of the Sherman & McConnell Company would answer admirably. It would hardly increase the demand for mineral waters, but ought to bring the established trade their way. The circular is very neatly printed, lists 40 or more waters and mentions briefly their value, and shows the necessity of procuring the genuine waters of known merit. It could hardly fail to impress people with the idea that when they want mineral waters it would be well to get them at this establishment. I believe it would have been advisable to have said something in this circular about their facilities for buying and storing waters, and to have given some prices. In another circular they make close prices on one water, and I presume they sell at liberal figures throughout. If so, prices would have added to the pulling powers of this piece of printed matter.

It is a little unusual for druggists to push the mineral water business. It looks as though Sherman & McConnell had found it profitable to do so. What has paid them would doubtless pay others, especially those in the larger cities. In nearly every field there is some line of goods that can, with advantage, be made a specialty. It may be mineral waters or something else. Every druggist ought to analyze the conditions about him, and endeavor to get a firm hold on any special class of trade created by local conditions.

AS TO COPYING.

I see nothing to criticize in the fact that Mr. Trunk copied part of his circular. We are all conscious or unconscious imitators, and in nothing do we imitate more than in method of thought and manner of expression.

Between a poor original circular and a good copied one, I would advise the latter. There is no patent on ideas, but it is just as well to use a little common honesty in the matter. When you can borrow ideas without in any sense injuring the man who originated them, then I see no harm in doing it. It is well to be as original as we can, but originality is a scarce article, and we often discover that our brightest ideas were in general circulation some thousands of years ago.

Emerson, in his essay on Shakespeare, says: "He steals by this apology,—that what he takes has no worth where he finds it, and the greatest where he leaves it. Thought is the property of him who can entertain it, and of him who can adequately place it. A certain awkwardness marks the use of borrowed thoughts; but, as soon as we have learned what to do with them, they become our own. Thus, all originality is relative. Every

thinker is retrospective." Elsewhere he says: "When we are praising Plato, it seems we are praising quotations from Solon and Philolous. Be it so. Every book is a quotation; every man is a quotation from all his ancestors."

An advertiser cannot expect very much, however, if he depends entirely on borrowed literature. I have never known a man to make a success of advertising who



## If You're Driven to Drink

by this warm weather, try our soda water. It is the one perfect drink, and indulgence is never followed by a season of regret. No beverage has so much health and refreshment in it as cool, sparkling soda. This best drink can be had at its best at our new fountain.

**SMITH & SMITH,**  
Druggists.\*

\* Electrocs of these or any illustrations in this series will be forwarded on receipt of fifty cents.

habitually copied his ads. It is our ability to adapt ideas, rather than stealing them outright, that helps us. The man who has to depend on mere copying lacks the faculty of making other people's ideas useful. It often happens that he can't even copy well.

Here is an illustration. The first ad. I saw in a country weekly; the second, evidently inspired by the first, in the weekly of an adjoining town.

We Sell  
Texas Fly Oil.  
Certain to exterminate these pests  
that annoy your cows and make them  
shrink their milk.

2

We Sell  
Texas Fly Oil.

Certain to exterminate these pests  
that annoy our cows. It makes  
them shrink their milk.

The last ad. is extremely rough on the Texas fly. Advertisers should seek suggestion and aid wherever they can find them, but must fit the ideas to their uses, and use them in just the right place and in the right way, or they will do little good. A ready-made ad. is apt to be about as good as a ready made sermon. When you see something good, run it through your own "mental mint" and impress it with your own personality. That is the kind of copying that counts.

A. S. Wetherell, Exeter, N. H., sends one of his recent ads. It is four columns wide and about 10 inches deep. He makes three divisions of his space, an extra wide column in the middle and narrow columns on either side. His ad. is well set and must have been conspicuous. Several things are advertised, but all under bold separate headings, which is the proper method. The ad. is well written. Definite information is given about most of the articles, and some special prices are quoted. Such ads. ought to sell goods.

## DISPENSING DOCTORS.

I heard a tale of woe not long since. In a town of 80,000 inhabitants, containing 30 or 40 doctors, but one physician prescribes regularly. The rest buy their supplies largely out of town. The druggists feel that they have a grievance and grumble thereat. So they have, but they have been growling for several years, while the condition remains unchanged. It struck me as being about time for some energetic drug man to stop "kicking," which avails nothing, take the bull by the horns and sail into working up a physicians' supply trade. The druggist has facilities for making a large proportion of the preparations that doctors are buying from one horse supply houses. There is a good profit in them. If a druggist has standing, there is no reason why he could not, in time, control the bulk of this trade.

Sherman & McConnell are cutters. The little booklet they send advertises a variety of goods and quotes prices throughout. It also calls attention to a number of special features, among which is that of a lady clerk in their prescription department. The booklet is very nicely printed on good calendered paper. The printing, the prices and the manner of distribution should make it very effective. Most druggists in putting out 5,000 circulars would try to make \$8 or \$12 cover the expense. I presume that the printing and distributing of this little booklet cost \$75 or \$80. In this instance, at least, the \$80 outlay was more economical than an expenditure of \$10 would have been. This statement sounds like a mistake; but it is not. In advertising it is never economical to pinch.

## ILLUSTRATED ADVERTISEMENTS.

I offer here a couple of suggestions for illustrated ads. These are properly introductions that could be followed by more specific information. As a rule, I do not approve of the use of humorous cuts in drug advertising. There would

be less objection to their employment if they were used in connection with such subjects as those here chosen. I would hardly care to tack a prescription talk, or an ad. for the business in general, to an illustration of this kind. The best that a humorous cut can do is to attract attention, and that is not the best use of illustration. I am well aware that many people think differently, especially the artists who conjure up illustrations—it is pretty hard to get the opposite idea into the heads of many of them without trephining their skulls—yet my own experience has taught me to use the funny cut with caution. Nonsense will attract attention and amuse people, but it is sense that sells goods. Perhaps a little nonsense now and then used with discrimination may serve to put your readers in a good humor and make them more receptive to the sense that follows. It is in the abuse rather than in the use of humorous cuts, that the objection lies.

### Advertising by Druggists.\*

BY LISTON P. EVANS,  
Dover, Maine.

When so wise a man as Solomon tells us that there is no new thing under the sun, and the history of the centuries since his day testifies to the truth of his statement, you will certainly pardon me if my subject is not new and original. It is "Advertising by Druggists," and when men who can earn \$10,000 a year in writing advertisements acknowledge that they have very much to learn, you need not expect me to exhaust the subject in this paper.

I speak, however, from an experience of 17 years, and shall judge others by myself.

#### ONE FORM OF ADVERTISING.

I shall assume that every druggist believes in advertising, else every druggist would not put goods in his windows, or in his door, or on his counters, so they can be seen. This is one form of advertising, and tends to the desired end of calling the attention of the people to what he has to sell.

Druggists have so much advertising matter furnished them without cost that they have unusual opportunities for cheap advertising. I have found it a good plan during the almanac season to take one each of the various kinds of almanacs, together with circulars, booklets, etc., make them into a roll, and when a customer calls for an almanac, or when they do not ask for one, give them a roll. Perhaps the city customers will not read them as carefully as do the country people, but they will be looked through, and you will be well paid for your trouble.

#### ADVERTISING BY MAIL.

One of the best methods of advertising at little expense is by means of a mailing list. Get together a list of heads of families, and people who are likely to buy goods in your line, residing in your town, and in surrounding towns tributary to your town. Have this list printed in sheets, in sufficient number to last several years, and then send the list to the patent medicine proprietors who use mailing lists, and you will be surprised at the number who are glad to mail advertising with your imprint. By a

\* From the Proceedings of the Maine Pharmaceutical Association.

little calculation you can have a constant stream of circulars flowing into the homes of actual or desired customers. For instance, you can send your list to the Pink Pills people this month.

You can send your list once a year to the postmasters and have it revised. The corrections can be made on the printed slips with little trouble.

In collecting your list, don't use a voting list unless you can ascertain the post

## A Decided Hit.



The hit might have been reversed had the tenor provided himself with a package of our

### THROATEASE.

It clears and strengthens the voice. There are better remedies for coughs and colds, but none so good as this for roughness, tickling or irritation of the throat.

Throatease does nothing but relieve throat troubles. It has never failed to do that.

SMITH & SMITH,  
Druggists.\*

\* Electrocs of these or any illustrations in this series will be forwarded on receipt of fifty cents.

office address of the voters, for there may be several offices in town.

Whenever you can, have your name under the ads. of patent medicines printed in your local papers. It will bring trade to you. I sold ten dozen of a \$1 catarrh cure a few years ago by means of a small ad. over my name containing a testimonial from a prominent man in town.

#### NEWSPAPER ADVERTISING.

I have so far spoken principally of the advertising done for you by the proprietors, now I come to advertising for which you must pay—viz., newspaper advertising.

It is a fact that but few druggists make use of the columns of the newspapers, but this does not prove that it would not pay them to do so. If it pays the dry goods dealers and the clothing dealers to use the large amount of space they use, it ought to pay the druggist to do a reasonable amount of advertising. He has bargains to offer as well as the other dealers; he has new goods to sell as well as they, but like them, he must advertise goods that the public want to know about. You do not see a clothing house running an ad. month after month, stating that they sell hats, caps, dress suits, overcoats, overalls, etc., but you frequently see the ad. of a druggist in which he informs the public that he deals in pure drugs and medicines, toilet goods, sponges, patent medicines, etc.; physicians' prescriptions carefully compounded. It would be about as well for him to simply say John Smith, druggist, and save the rest of the space, for every one knows that a druggist keeps nothing but pure drugs, and that he always keeps patent medicines, toilet goods and sponges. This is where the dry goods dealer and clothing man beat the average druggist; they tell the people something new in their ads., while the druggist tells them something old.

#### GET MORE CUSTOMERS.

To sum up my ideas: We all do business to make a dollar, and are all seeking for ways to increase that dollar to a dollar and a half, or two dollars. To do this, we must sell more goods, and to sell more goods we must get more customers or get the old customers to buy more. To bring this about we must let the people know what we have to sell; to let them know what we have to sell we must advertise. How to advertise in the best way is a question of great importance, for it is easy to waste the money so invested by advertising in a poor way.

#### ONE WAY OF WASTING MONEY

is by letting your ad. run week after week, and month after month without a change. Every one can see the folly of letting goods remain in the windows until they are covered with dirt, and every advertiser should be able to see the folly of letting his ad. run until the goods advertised are out of season. Some articles people buy every month in the year, but in Maine they do not buy Tanglefoot in winter nor lung protectors in summer. So when you advertise goods out of season your money is wasted. Change your ad. often enough so the public will watch for it to see what you offer this week.

#### BAD ADVERTISING.

In my opinion, another bad way of advertising is through circus programmes, or any transient advertising sheets got out by some man who comes to your town, gets your money and goes away. In advertising this way, some one doubtless makes money, but the some one is not yourself.

I do not think it pays to advertise in school papers or church papers, but sometimes it is policy to patronize them; it causes good feeling on the part of the school or church, and you may get your money back indirectly.



## NEWS OF THE FORTNIGHT.

### Wholesale Druggists Sued.

New York members of the National Wholesale Druggists' Association have been served with papers in an injunction suit brought by the Cincinnati firm of John D. Park, Sons & Co., to restrain the Proprietary Committee of the association from interfering with the business of the plaintiff. The full text of the temporary injunction granted by Judge Truax is printed on pages 811-812.

### Victory Over a Department Store.

The Kings County Board of Pharmacy has scored a decided victory in their action against a firm of Brooklyn dry goods men for alleged persistent violation of the pharmacy law. The case is all the more noteworthy in that it is the first case on record in this part of the State in which the issue has been sharply raised as to the legality of the sale of medicine in any form by dry goods men. We give a detailed account of the proceedings, together with the text of the magistrate's decision, on pages 812-813.

### Industrial Chemists Discuss the Training of the Chemist.

The New York Section of the Society of Chemical Industry has proven its usefulness to chemists generally over and over again by the very interesting and valuable character of its monthly meetings. At the meeting held May 18, Dr. Duisberg, director of the widely known Farbenfabriken of Elberfeld, was present and read a particularly suggestive paper on "The Education of Chemists." A discussion ensued, in which many well-known chemists participated. We report the meeting on page 814.

### Obituary.

The news of the death of Edwin A. Bigelow of the J. C. Ayer Company, Lowell, Mass., will be received with sorrow by all who knew him well. He was a whole souled man of genial disposition, and will be remembered by a host of friends and acquaintances as the active representative of the J. C. Ayer Company at all meetings of the two associations of wholesalers and manufacturers of proprietary remedies.

The loss of Alexander Wilbur of Boston, who died April 28, will be keenly felt in Boston drug circles. He was widely known as a manufacturing chemist.

## N. W. D. A. Enjoined.

The injunction suit brought by the Cincinnati firm of John D. Park & Sons Company to restrain the National Wholesale Druggists' Association from interfering with their business, of which the trade received the first intimation in these columns (AMERICAN DRUGGIST, March 25), was begun before Judge Truax in the New York Supreme Court, Saturday, May 9, and an injunction was granted four days later.

Gen. Wager Swayne, in his application for an injunction, explained in detail the stages of the formation of the National Wholesale Druggists' Association, and how the members of it will neither buy from nor sell to druggists who are either not members or have not agreed to be bound by or carry out its rules and regulations. "To conceal, if possible, the monopoly of the trade and commerce in such proprietary goods throughout the United States," the appeal for an injunction continues, "and the restraint and control of such trade and commerce and the prevention of competition therein as contemplated by said association and the several members thereof, the said before-mentioned contracts, agreements and stipulations should be put in the form of and evidenced by separate and individual contracts and agreements."

The plaintiffs further state on information and belief that all but four or five of the wholesale jobbing druggists of the entire United States, not members of the association, have agreed to submit to and be bound by the rules and regulations, and to buy and sell proprietary goods subject to the contracts and agreements, restrictions and limitations of the association. The Committee on Proprietary Goods of the association from time to time issue to all members of the association and other persons lists and circulars containing the names and places of business of each and every person or persons refusing to make contracts, agreements and stipulations, and of each and every person violating such contracts. And the wholesale and jobbing druggists refuse to buy or sell the proprietary goods of any manufacturer or proprietor so reported.

### AFFIDAVITS SUBMITTED.

A number of affidavits were submitted with the complaint. One was by Orlando H. Jadwin, a wholesale dealer in drugs, chemicals and proprietary goods or patent medicines. As such, he has been accustomed to sell to John D. Park & Sons Company. The Committee on Proprietary Goods of the Druggists' Association, Jadwin swears, have issued lists and circulars notifying members of the association that he was supplying the Park Company with proprietary goods,

and thereupon and on that account the proprietors have refused and now refuse to sell to him any of their goods whatsoever except at long prices, i. e., without discount. Jadwin further states that the defendants are attempting to ruin or destroy the business of John D. Park & Sons Company, and that, from his personal knowledge of the business of the said Park Company, such business would be absolutely ruined and destroyed before the proceedings can be finally determined unless said defendants were restrained by a preliminary order of the court from carrying out the contracts and agreements, and that the loss of such business could not be compensated for in damages. Appended to the affidavit was a list of exhibits showing in detail the methods of the association to force the signing of the agreement.

The hearing did not last more than five minutes, Judge Truax granting the injunction immediately the papers in the case were handed up. The text of the injunction follows:

### Text of the Injunction.

New York Supreme Court, City and County of New York.—John D. Park & Sons Company, a corporation organized under the laws of the State of Kentucky, plaintiff, against the National Wholesale Druggists' Association, and others, defendants:

It appearing to my satisfaction, by the complaint herein, verified the ninth day of May, 1896, supported by the affidavits of Orlando H. Jadwin, Ashton M. Boney and Noah H. Swayne, 2nd, all verified the eleventh day of May, 1896, that the plaintiff demands and is entitled to a judgment against the defendants restraining the commission of the acts hereinafter enjoined, for the reason that the said acts are done by virtue of illegal combinations, and conspiracies, to monopolize the trade in drugs and proprietary medicines; to control and regulate the prices at which the same shall be sold; to prevent any and all competition in such trade; and to prevent any persons not members of said National Wholesale Druggists' Association from doing any business as wholesale and jobbing druggists; and for the reason that the plaintiff, having refused to become a member of said association, the said defendants have combined and conspired, and are combining and conspiring to injure, ruin and destroy its said business, and are spying upon the business of the plaintiff, and ascertaining the names of the persons from whom it buys and to whom it sells, and have been and are inducing such persons, so buying from or selling to the plaintiff, not to contract with or buy from or sell to the plaintiff, and have been and are exacting sworn pledges and promises from such persons not to contract with or buy from or sell to the plaintiff, and have been and are issuing lists and circulars, and distributing the same, to all the defendants and other members of said association, and other persons engaged in the drug trade, notifying them of the names and places of business of the persons buying from and selling to the plaintiff, and calling upon them and all of them not to deal with or sell to the persons named in the said lists and circulars. And it further appearing to my satisfaction that the commission or continuance of said acts, during the pendency of the action, would produce injury to the plaintiff, and that the said defendants are about to proceed and will at once proceed, by means of the contracts and agreements in the complaint set forth, to induce other and further persons not to buy from or sell to the plaintiff, and to ruin and destroy its business, and that thereby the business of the plaintiff would be absolutely ruined and destroyed before this proceeding can be finally determined, and that it would be impossible to recover its damages in relief commensurate with such total loss to the business of the plaintiff, and that such relief by way of damages would make necessary a great multiplicity of suits. And it further appearing by the said complaint and affidavits that the defendants during the pendency of the action are doing or procuring to be done, and threaten or are about to do, the acts herein enjoined, in violation of the plaintiff's rights; and the plaintiff having duly given an undertaking, in the sum of one thousand dollars (\$1,000), as required by law:

Now, on motion of Swayne & Swayne, attorneys for the plaintiff, it is Ordered: That, until the further order of this Court, the defendants in said complaint named, and each and every one of them, their directors, officers and agents, be enjoined and restrained, as follows:



First—That each and all of the defendants in said cause named be enjoined, until the further order of this Court:

1. From continuing to conspire and combine together, or with any other person or persons whomsoever, by means of said National Wholesale Druggists' Association, or by any other means, to carry out and enforce the unlawful contracts and agreements, plans and methods, set forth in the complaint, or any of them, as against this plaintiff.

2. From continuing such unlawful combinations and conspiracies, and from acting under and carrying out said contracts and agreements, methods and plans, to injure, ruin and destroy the business and trade of this plaintiff; from continuing to spy upon its business or ascertain the names and places of business of the persons from whom it buys or to whom it sells any of such proprietary goods; from continuing to issue or distribute by and through the said Committee on Proprietary Goods, or by any other means whatsoever, circulars or lists of the persons so buying from or selling to the plaintiff, or of the persons to whom such goods may be sold; from continuing to induce any person or persons whatsoever not to contract with or buy from or sell to this plaintiff or to violate their contracts with it; and from continuing to exact sworn pledges from any person or persons not to contract with or buy from or sell to this plaintiff.

Second—That each and all of the officers of said National Wholesale Druggists' Association and each and all of the members of said Committee on Proprietary Goods, and all the other defendants in this action named, be enjoined until the final determination of this cause from carrying out or enforcing any of the aforesaid unlawful contracts and agreements, methods and plans; and specifically from issuing or distributing any lists or circulars or doing any other thing to advise or inform the defendants herein, or any of them, or any other members of said association, or any other person or persons, of the names or places of business of any person or persons refusing to make or violating such unlawful contracts and agreements, of the names and places of business of any person or persons buying from or selling to this plaintiff, or of the names or places of business of the person or persons to whom said goods may be sold; and from inducing any person or persons not to contract with or buy from or sell to this plaintiff; and from taking sworn pledges from them not to do so.

And that the defendants or their attorneys show cause before me, or one of the justices of this Court, at a Special Term thereof, to be held at Chambers at the County Court House, in the City of New York, on the 20th day of May, 1896, at 11 o'clock in the forenoon, or as soon thereafter as counsel can be heard, why this injunction should not be made permanent; of which motion service of this order on or before the 25th day of May, 1896, shall be sufficient notice.

Dated, New York, May 18, 1896.

CHARLES H. TRUAX, J.

The National Wholesale Druggists' Association, through its Committee on Proprietary Goods, will take up the cause of the defendants in the suit. H. Le Barre Jayne and J. G. Johnson of Philadelphia, together with Robinson, Biddle & Ward of this city, have been retained as counsel by the Committee on Proprietary Goods.

The following letter from the chairman of this committee has been sent out to the members affected:

PHILADELPHIA, PA., May 18, 1896.

GENTLEMEN.—As Mr. H. Le Barre Jayne of Biddle & Ward, this city, has been acting as attorney for this committee in connection with J. G. Johnson, and as their New York connections, Robinson, Biddle & Ward, 160 Broadway, are a firm of very high standing, I have asked Messrs. Jayne and Johnson to prepare an answer to the suit in equity brought by J. D. Park & Sons' Company against the N. W. D. A., in order to have the preliminary injunction recently granted dissolved. This will be forwarded to their New York firm, and I suggest therefore that you place your case in their hands, as it will avoid a multiplicity of bills, and on the whole be doubtless very much more economical if handled in this way.

My impression is that an assessment upon the members of the association to defray the expense of defending this suit will have to be made, and from the funds thus raised the costs, whatever they may be, for the defense will doubtless be paid.

Of course, if you prefer, in connection with Robinson, Biddle & Ward, to employ your own individual attorney, there is no objection to your doing so, but important that he will co-operate with the above law firm, and provided any expense for the employment of such individual attorneys will be defrayed by the individual members.

This letter is hastily written, to anticipate the question which I think will naturally arise from the individual members; but as it has the approval of our attorney, I think it will not need any revision later on.

M. N. KLINE, Chairman.

### What is Thought of the Case in Philadelphia.

PHILADELPHIA, May 20.—The suit brought against the N. W. D. A. by the Cincinnati drug house is creating considerable interest throughout the trade, as it is thought that if this house should win it would mean a disruption of the association and the killing of the patent medicine business for the next five years. While the preliminary injunction only affects the State of New York, there is nevertheless considerable interest taken in the matter in this city, and the officers of the association are in constant communication with the lawyers who represent this body. John G. Johnson and H. Le Barre Jayne are the representatives here, and as the former is one of the best corporation lawyers in the United States

his opinions are sought for. The defense has until May 29 to file its answer; and while this has not all been prepared it is understood that most of the charges will be denied, as many of them are wrong and irrelevant.

While the injunction is in force this Cincinnati house finds considerable trouble in securing goods, as the injunction is only against the N. W. D. A., and not against any members of the Association. It is said that some of the members have received orders from this house, but have refused to fill them except at the long price and for cash. It is claimed that the druggists can sell to whoever they please, and they have been advised to do so.

MR. KLINE LOSING NO SLEEP.

M. N. Kline, chairman of the Proprietary Committee of the N. W. D. A., is not losing much sleep over this suit; but he said if they should win he would not be surprised if his house would go out of the patent medicine business.

## The Department Store Defeated.

Our readers have been kept well posted on the different moves in the suits brought by the Kings County (Brooklyn) Board of Pharmacy, and we are the first to convey to the pharmaceutical public the fact that the judgment of the lower court has been rendered and that the defendants have been found guilty. The fact that this is the first case, so far as we recall, where the issue has been squarely joined with a large department store renders the case one of vast importance to pharmacists all over the United States, and we therefore present the documents in the case in full.

After making a thorough canvass of the city and warning a score or two of small grocers to desist from the sale of drugs and poisons, which they were doing in contravention of the pharmacy and poison laws, Donald L. Cameron, president of the Kings County Board of Pharmacy, called at several of the large department stores and found that some of them, taking warning from the agitation of the matter, were taking steps to discontinue the sale of all drugs other than patent medicines. The firm of Abraham & Straus, however, who conduct one of the largest department stores in Brooklyn, still continued the sale of drugs. Acting for the Board, President Cameron purchased a bottle of paregoric and a bottle of quinine pills from Abraham & Straus, and then lodged a complaint against them for violating the pharmacy law. After numerous and most annoying postponements, the case came up for trial before Justice Walsh, sitting in the City Hall Police Court, on April 8, who, after hearing the evidence, announced that he would allow the counsel a week in which to submit briefs, and these briefs we present in full below. Judgment in the case was rendered last week, and the text of this judgment is reproduced in our editorial columns.

Under the laws of New York the District Attorney acts as prosecuting officer for the Board of Pharmacy, and the brief for the defense, therefore, was drawn up in the office of that official.

### Brief for the People.

The People of the State of New York,  
against  
S. F. Rothschild, et al.

Before  
Hon. John J. Walsh.

The defendants are charged with a violation of Section 9 of Chapter 502 of the Laws of 1879,

as amended by Chapter 272 of the Laws of 1886; and more particularly they are charged with a violation of that part of such section which reads: "Any person not registered who shall keep open shop for the retailing or dispensing of drugs, medicines or poisons, or prepares physicians' prescriptions, except under the immediate supervision of a registered pharmacist, or registered assistant pharmacist . . . shall, for every such offense, be deemed guilty of a misdemeanor, and, upon conviction thereof, be liable to a penalty not to exceed five hundred dollars." Everything that is necessary to bring the defendants within the requirements of the section referred to is conceded by the defendants, and no issue thereon is made by them, except it is contended upon their part that they do not "retail."

It is a well established principle that words are to be taken in their ordinary meaning, unless a contrary intent from the Statute appears. What is the meaning of the word "retail?" The accepted definition is, "to sell goods in small quantities, especially by those who have bought in larger quantities to re-sell at a profit." That the Legislature, when the law referred to was enacted, intended that this word as used in the Statute should mean anything other than this definition, does not appear. But the defendants say although the medicines sold by them were sold in small quantities, and although they bought them in larger quantities to re-sell at a profit, the fact that they were sold in sealed packages takes them out of the category of retailers.

If the analogy were drawn further, and each one of the packages sold was divided up so that it made a number of packages, say containing one pill each, and those packages were sealed up by some one other than defendants, and then they were re-sold by them, even then, if their interpretation of the Statute is correct, they would not be "retailers," because the medicines are sealed. This reduces their contention to an absurdity, because all goods in the original packages of the manufacturer could never be retailed, and therefore, the grocer who sells



canned corn, canned tomatoes, canned fruit, or beer in bottles is not a retailer of such articles, because he sells in the original packages of the manufacturer, and we must, if we rely upon the argument of the defendants, necessarily come to the conclusion that no one can be a retailer unless he buys his goods in bulk and then sells them in packages put up by himself. Therefore, within the meaning of the Statute and within the domain of common sense, the defendants, on the day charged, were keeping open shop for the retailing or dispensing of medicines.

If the Legislature intended that the word "retail" should have the meaning given to it by the defendants, it would have been unnecessary to have added the words "or dispensing." It meant that it should cover both retailing and dispensing. The error of the defendants has been and is that they confound "dispense" with "retail." To dispense means "to deal out or divide in portions." It cannot be possible that it was intended that these two words, retail and dispense, should be taken as synonymous.

But the Statute goes further, and says: "Any person not registered who sells, compounds or dispenses, etc." There is no question but that, on the day charged, the defendants sold medicines, and that they sold them not as registered pharmacists or under the immediate supervision of a registered pharmacist. This brings them clearly within the Statute.

In the case at bar The People simply ask that an interpretation of the Statute involved be made; there is no disposition upon their part to insist upon the punishment of the defendants, for undoubtedly what they have done in violation of the law was done under a misapprehension or under an honest doubt. An adjudication should be had upon the question. There are to-day in the City of Brooklyn four hundred and eighty registered pharmacists who are conducting stores as such. If, under the law, it is necessary for them to educate themselves, and spend time and money in procuring such education that they may be registered as pharmacists, and at the same time any one else can retail drugs and medicines without being registered and without such expense, it ought to be known. The very object of the law is to protect the public and the community. It is a police regulation. Its intent was that only skilled and trained men should deal out the consumer drugs and medicines; its purpose was to furnish a voucher that when a person purchased drugs and medicines no mistake would be made, and that life and health would not be endangered by their use. It cannot be possible, therefore, that a law with so good a purpose, which has been generally carried out with such beneficial results, can be evaded in the manner in which defendants attempt to do.

Any person can evade it if the contention of the defendants is correct; any person can retail or dispense medicines and drugs, if they take refuge in the fact that they are sold in the original packages of the manufacturers. But what is there to vouch for the manufacturer? How are we to be protected against him. There is no protection, and any person, whether he be a shoemaker, a barber or a blacksmith, can put medicines in packages and seal them up, and A, B, C, D, and every one else, can sell them to the consumer, because they are in the "original packages" of the manufacturer.

Such was not the intent of the law. Its intent was that medicines should not be sold to the consumer except by or under the supervision of a registered pharmacist, for in that way, and in that way only, can the public be protected.

APRIL 11, 1896.

FOSTER L. BACKUS,  
District Attorney of Kings County.  
EVERETT CALDWELL,  
of Counsel.

Edward M. Grout of Grout, De Fere & Mayer, who drew up the following brief for the defense, is one of the best

known and most brilliant lawyers of Brooklyn:

### Brief for the Defense.

POLICE COURT.

The People

vs.

Abraham & Straus.

Defendants are prosecuted under the provisions of Chapter 503, Laws of 1879, as amended by Chapter 272, Laws of 1886.

The proof shows that they are not registered pharmacists, and have no registered pharmacist to supervise the sale of medicines; that on February 11, 1896, they sold one bottle of paregoric and one bottle of quinine pills in their store on Fulton street; that these articles are "medicines"; that they were sold in unopened, corked and sealed bottles, the "original packages of the manufacturers," as described, substantially, by the complaining witness.

There is no proof or claim that defendants ever sold or offered for sale anything less than a full and unbroken "original package of the manufacturers."

This act is not within the prohibition of the law. Such prohibition is contained in the first section of the act. So far as it can be claimed to be here applicable, it is against conducting "a store for retailing, dispensing or compounding medicines or poisons." There is no claim that the defendants "dispense or compound," but only that they "retail."

The penal provisions of S. 9 of the act cannot, of course, enlarge the prohibition of S. 1.

The act in its purpose and purview, to be valid, must be regarded as an exercise of the police powers of the Legislature, for the protection of the public, that is, as a health law.—People vs. Warden, 144 N. Y., 539.

It cannot be deemed that its purpose is to create a monopoly.—Idem, at 539.

Hence, it must be construed with this lawful purpose of preserving the public health in mind and not otherwise.

With this purpose of preserving the public health, the law prohibits the "retailing, dispensing or compounding of medicines or poisons," except by registered pharmacists (S. 1 of act) and imposes upon such registered pharmacists an unlimited responsibility for the quality of the medicines which they sell, or dispense "with the exception of those sold in the original packages of the manufacturers, and also those known as 'patent medicines.'" (S. 6 of act).

No purpose as to public health affects the sale "in the original package of the manufacturer," since, in selling such packages unbroken, the dangers of confusing or mixing or adulterating the substance are avoided.

Substantially, the effect of this exception in S. 6 is to say that selling in original packages or selling patent medicines is not retailing, dispensing or compounding; for the registered pharmacist is not made responsible for the quality of such "original packages" as he may sell (the word "sell" being, of course, of a broader meaning than "retail," and including "wholesale" as well).

That such was the legislative intent may properly be gathered from other legislation on the same subject matter.—People vs. Butler, 147 N. Y., 164.

Thus the Public Health Law (Ch. 661, Laws of 1893) regulates pharmacies outside of New York, Kings and Erie Counties, codifying and re-enacting, with revisions, Ch. 361, Laws of 1884. That act expressly (S. 187) excludes from its prohibition medicines and poisons "sold in original packages," and the exception follows the broader word "sell."

Selling medicines and poisons "in original packages," is, therefore, clearly not within the legislative intent in the prohibition against "retailing, dispensing or compounding."

But even if the intent of the Legislature had not been thus revealed, the use of the word "retail" would be sufficient of itself to exclude the act of these defendants.

The word comes from "retalia," and its root meaning is the cutting up again, or division of a commodity into smaller parts.—Burrill's Law Dictionary. Kinney's Law Dictionary.

The Standard Dictionary defines the verb "retail" as "to sell in small quantities, such as are immediately called for by customers," and the noun as meaning "the selling of goods in small quantities, especially by those who have bought in larger quantities." This definition preserves the root idea of cutting up or dividing.

The Imperial Dictionary, after stating the derivation of the word, and before giving its applied meanings, says "retail is thus to sell by pieces cut off."

The Am. and Eng. Encyc. of Law, Vol. 21, p. 236 defines the word as "to sell in small quantities or by small parcels, and not in gross."

But this definition is inaccurate in omitting the idea of cutting up the larger quantities or parcels into the smaller. In other words, "retail" in its full meaning describes a process (i. e., the cutting up or dividing) and, a result (i. e., the smaller quantities or parcels) and a definition of the word must not (as do some definitions) describe only the result and neglect the idea of process.

Webster's definition is strictly accurate. He gives the derivation, from re, again, and tailer, to cut, and the meaning is "to cut up and dispose of in smaller parcels. Hence, to deal out in small portions." Thus due regard is given to both the process and the result imparted by the word.

The cases cited by the Encyclopedia of Law, while liquor license cases, where the statutes customarily indicate the quantity which marks the line between wholesaling and retailing, still indicate that the courts have not excluded this idea of cutting up or dividing into smaller quantities or parcels.

Thus, in State vs. Lowenhaupt, 11 Lea (Tenn.) 13, the court says "retailing is selling by small quantities to suit customers articles which are bought in larger quantities generally;" and in Goruth vs. Butterfield, 2 Wis., 237, it is said "the term 'wholesale' implies the selling in or by unbroken parcels, as by the barrel, pipe or cask, etc., while the term 'retail' implies the cutting up or dividing such pieces, parcels or casks, into smaller quantities, and selling to customers in such manner."

This idea of the word "retail" is thoroughly consistent with exception of the sale of "original packages of the manufacturer" in the sixth section of this act, for one who sells such packages, as do these defendants, does not "cut up or divide."

The defendants should therefore be discharged.

GROUT, DE FERRE & MAYER,  
Attorneys for Defendants,  
EDWARD M. GROUT,  
of Counsel.

As noted, judgment was rendered for the plaintiff.

### A Druggist Punished.

CHARLESTON, May 14.—The secretary of the South Carolina State Pharmaceutical Association of Charleston has been notified that Dr. John May, a druggist of Yorkville, was at the last term of the York County Court found guilty of violating the dispensary law in selling whiskey, and was sentenced by Judge Witherspoon to pay a fine of \$150 or four months in the State penitentiary. Under section 18 of the dispensary law every pharmacist con-

victed of violating the act is compelled to forfeit his license and be stricken from the membership roll of the Pharmaceutical Association. In accordance with

the law Dr. May has been notified that he has been debarred as a member of the association, and requested to return his license, which has been forfeited.

## Society of Chemical Industry.

### Meeting of the New York Section.

**A** LARGELY attended meeting of the section was held May 18, at the College of Pharmacy, 115 West Sixty-eighth street. The meeting was called to order by the chairman, Alfred Hy. Mason, at 8.40 p.m., Dr. H. Schweitzer recording. The principal paper of the evening was by Dr. Duisberg, the director of the Farbenfabriken vorm. Fried. Bayer & Co. of Elberfeld.

#### THE EDUCATION OF CHEMISTS.

Dr. Duisberg's paper consisted of a most interesting description of the requirements of a German chemist and of his education. The acknowledged pre-eminence of Germany in the field of chemical industry had not, he said, been obtained by accident, nor by good luck; neither had it come from abundance of material, for many countries were much better off in all of these respects. Success had been achieved only by steady and definite work in the education of capable and efficient chemists. A chemical plant which had not the advantage of direction by trained chemists was compared by the speaker to a blind man stumbling and feeling his way along an unknown path with the aid only of a cane. Many details of the operation of large plants were given. Works formerly employing one consulting chemist now had every worker more or less proficient in organic chemistry. In one establishment of which he had knowledge, over 600 chemists were employed, 65 per cent. of whom were doctors of philosophy, while 85 per cent. were graduates of technical schools. In his own works none were employed except those who had previously studied either at a university or some high class technical school and received its diploma. Every fortnight the 40 or more chemists of his establishment were assembled to meet the director of the works, when every one from superintendent down to the youngest recruit was required to make a report of his work, and to relate any difficulties or problems that had come to his notice since the previous meeting. Not only that, continued Dr. Duisberg, but he is required to give an account of his reading and study during the interval. The speaker explained that to pass a German technical school requires two or three years of study, according to capacity. The university course is somewhat more extended; but before entering either a good foundation is required, such as is obtained in a high school or gymnasium. The university course requires in all some six or seven years of study, which means an expenditure of perhaps 10,000 marks or more. The capital was well invested, however, since expert chemists command high salaries.

In touching on the factors which influenced the proper training of the industrial chemist Dr. Duisberg laid especial stress on the value of a thorough preliminary knowledge of the principles of inorganic chemistry. "Inorganic chemistry," he said, "is the foundation of the whole structure of chemistry. Practical

inorganic study was a necessary beginning for all special chemical work. When the chemist is thoroughly acquainted with inorganic chemistry, both theoretical and practical, when he has mastered analytical chemistry, when he is at home in the assistant studies, such as physics, mineralogy, etc., he can then safely turn to organic chemistry. Here the center of gravity is preparatory work."

Dr. Duisberg concluded by saying he was not sufficiently well acquainted with the conditions obtaining in the United States to properly gauge them, but he was firmly convinced that the requirements he had described for the education of chemists in Germany were also of application here.

#### Discussion.

An interesting discussion followed the reading of the paper. Chairman Mason thanked Dr. Duisberg in behalf of the members, saying in part:

"The paper tells us in forcible language

#### THE SECRET OF GERMANY'S SUCCESS

in chemical industries. That Germany stands at the head of the world in such industries to-day every country has to admit; and each country has been searching for the secret. Dr. Duisberg has told us this evening wherein lies this success, and in some countries provision is being made for that technical education which alone is necessary to bring about these results."

#### AMERICAN SCHOOLS CATCHING UP.

Dr. W. Jay Schieffelin testified to the tremendous importance which Germans attach to thoroughness in chemical work. He considered it a very significant and pleasing fact that the American schools are catching up to the foreign ones in regard to thorough technical and practical education.

#### AMERICAN HASTE.

Professor Coblentz spoke of the difficulties that American teachers labor under. "Americans," he said, "want to be chemists, they want to become so real quick, and they don't want to bother much about learning the theory of chemistry. They will go to work and take a young man, even before he has completed his school education, and say to us, 'Here, I want to make a chemist out of my son.' They will turn him into a college, the college will hurry him through, and he comes out an analytical chemist, able to get along very nicely in that one specialty of his, but always laboring under the disadvantages that he has not got the foundation, and we Americans will never be able to compare with European institutions of learning until our own institutions exact stricter requirements."

#### GERMAN THOROUGHNESS.

Dr. R. G. Eccles followed, and paid tribute to the excellent character of the

paper read by Dr. Duisberg. He was reminded of a speech heard in England some time ago, when an English professor pointed out one very important feature of the difference between England and Germany. He said an Englishman first discovered the aniline dyes in England. The Germans took hold of the foundation laid by England, and have beaten England in their own field. He inquired the cause of this, and found it was the thoroughness with which the Germans were educating their chemists.

#### HABIT MAKES THE MAN.

Dr. Eccles was forcibly reminded, in listening to Dr. Duisberg's paper, of the general tenor of educationalists throughout America to-day. American teachers now insist upon a student in every field being thoroughly posted in the study that he has undertaken. They point out the fact that it is habit that makes the man; that if you establish a habit of careful, thorough work in him he cannot break away from that habit. It will stick to him throughout life.

Dr. C. F. McKenna spoke of the need for greater thoroughness in our educational institutions, and said that the hint thrown out in Dr. Duisberg's paper that thoroughness must begin lower down was a most useful one to our educators. He thought Professor Coblentz's remark about the great hurry of the American student very apt.

#### AN EXAMPLE WORTH FOLLOWING.

Dr. Horne said he was impressed forcibly with one point in the paper, and that was the generosity of spirit displayed by Dr. Duisberg in taking the trouble to complete the education of the young men he had under him. It was an example which, he said, might be followed very advantageously by all who have men in their employ in the chemical industries, to teach not only their chemists but the common workmen the reasons for the work which they do. A case came to his notice not long ago, which he instanced. A man in a sugar refinery had allowed a large tank of sugar solution to become quite acid through fermentation, and Dr. Horne asked him why he had not stopped the fermentation by adding some lime to it. Well, "he knew they put lime in the tanks upstairs when they got acid, but he didn't know they put it in down there." It had never been explained to that man that the lime had been added to stop the progress of the fermentation.

Albert Plant said the best testimony to the value of Dr. Duisberg's paper was the fact that it struck every one present in a different way. He was not a scientific man, but as an employer of labor, skilled and unskilled, one point impressed him forcibly, and that was that sufficient confidence was not always placed in the chemists attached to chemical establishments and similar works. It was the aim, in his establishment (Lehn & Fink), to obviate that, since because a man is a scientific man and possessed of a university degree does not mean he cannot be a practical business man as well.

Chairman Mason referred to the possibilities of the chemical industries of this country in the future. One of the great advantages which he thought this country had to-day was the fact that it could begin just where they now stand in Germany.

Among those present were Dr. Kolbe of Radebeul's, Dresden; Dr. Le Petit of Milan and Dr. Demuth of Elberfeld.

## Association Meetings.

### The Maryland Association.

The opening exercises of the fourteenth annual meeting of the Maryland Pharmaceutical Association took the form of a reception at the Carrollton Hotel, Baltimore. The programme of the evening included music and recitations by several ladies and members of the association.

The business of the fourteenth annual convention of the Maryland Pharmaceutical Association was opened by President Hymson in the Carrollton Hotel, Baltimore, on Wednesday morning, May 13, with some 50 members in attendance.

Dr. William Osler was introduced to the meeting as a delegate from the Maryland Medical and Chirurgical Association, and Dr. J. H. Redsecker of Lebanon, Pa., and Dr. Charles T. George of Harrisburg, Pa., as delegates from the Pennsylvania Pharmaceutical Association. Each made a short address, wishing the Maryland association success in its work and efforts, and conveying best greetings of their respective associations. Dr. Redsecker said: "Pennsylvania not only has a good pharmaceutical association, but the most complete machine political organization in the country; that the Republican majority there is sometimes greater than the entire vote in Maryland. I have thought that if I ever give up pharmacy I will go into politics, as you have nothing to do but follow the boss, the boss doing all the work."

President Hymson then delivered his annual address, in which he referred to the vital necessity which now existed for the pharmacists to organize for mutual improvement and self-protection. Had the organization of the State association been more perfect, there would have been no trouble, said the president, in securing the enactment of the much needed pharmacy legislation. The president also recommended that delegates from the State association to the A. P. A. be allowed mileage.

At the afternoon session the Committee on Legislation, of which Dr. Robert McKinney is chairman, reported that the committee recommends that the association continue to agitate in favor of the passage of the pharmacy law, the passage of which was defeated by the Legislature. The committee urged that an effort be made to conciliate the country merchants who opposed the passage of the law, because they thought it will interfere with their sale of patent medicines. The report was adopted.

Conway W. Sams, attorney for the association, delivered an address on the proposed law, giving his reasons for believing that it ought to pass.

#### COMMITTEE REPORTS.

The report of the Committee on Trade Interests, of which Dr. Louis Schultze is chairman, presented its report, and it was approved.

The report of the Board of Pharmacy, John F. Hancock, secretary, states that the Board has examined 107 pharmacist candidates, and rejected 40 per cent. of the applicants. The course pursued has been to make friends, and not to be too severe in prosecutions, the Board only having prosecuted two cases. The chief advantage of the work of the Board is in keeping out incompetent druggists.

After the presentation of the report of the Board, Prof. Charles Caspari delivered a brief address upon the use of the drugs of the Pharmacopoeia and of the National Formulary in preference to the preparations put out by the manufacturing pharmacists.

R. S. McKinney and Charles H. Ware both addressed the association upon the question of dispensing drugs to hospitals, etc., and touched upon the evils which generally grew out of this practice.

#### The Banquet.

Wednesday evening was devoted to a banquet served in the main dining saloon of the Carrollton, the banquet being served in an excellent manner.

When the coffee was served, Dr. Culbreth, who acted as toastmaster, called upon Colonel Love, formerly secretary to the Mayor, to respond to the toast of "Baltimore," which he did most charmingly. The next toast had for its topic "The American Pharmaceutical Association," and was responded to by Prof. Virgil Coblentz of New York. The other speakers of the evening were C. S. McWhorter, president of the West Virginia Pharmaceutical Association; F. W. Redsecker of Lebanon, Pa.; Conway W. Sams, Esq., of Baltimore; John M. Peters of New York; Dr. C. T. George of Harrisburg, Pa.; President H. P. Hymson and Drs. John M. Chambers and E. M. Reid of Baltimore.

#### Third Day's Session.

The third session of the convention opened on Thursday morning 11 o'clock.

The president introduced Miss Mary Watts of Port Deposit, who has for four years been compounding drugs at the Central Drug Store in Port Deposit. As the proprietor is a practicing physician, the conduct of the drug business has largely devolved upon Miss Watts. The report on pharmacy was followed by an address by Prof. Virgil Coblentz, which is printed in full elsewhere in this issue.

John F. Hancock read a paper criticising the official process for the preparation of medicated waters, and proposing simple solution in cold water agitation. He stated that he had better results by this means than when he used hot water as had been suggested.

G. Clinton Blades read a brief note to the effect that the official formula for syrup of tolu could be much improved, and stated that he preferred the use of tincture of tolu and carbonate of magnesium, as had been proposed by J. P. Finley in 1870.

J. Fuller Frames briefly criticised the present formula for syrup of wild cherry, saying that it would be an improvement to have the maceration last 48 hours.

Columbus V. Emich presented a paper in which he gave it as his opinion that it was feasible for the retail druggist to make a portion of his own fluid extracts.

Louis Hofstetter submitted a brief note, which was read, and in which he stated that about 70 per cent. of the senna used in the retail trade was Alexandrian senna, while about 25 per cent. was Tinnevely. The greatest outlet for the Tinnevely senna was in the manufacturing of proprietary medicines, in which a very large quantity was used.

Dr. A. R. L. Dohme gave a summary of the present state of knowledge of the constituents of the cactus grandiflora.

Dr. John Ayd made a few remarks upon the cultivation of more cordial relations between the medical and pharmaceutical professions.

The reports of several committees were presented, among which was the report of the Committee on Nominations, submitting the following names for the officers for the ensuing year. The report was adopted and the officers elected as named:

President, Harry B. Gilpin of Gilpin, Langdon & Co.; vice presidents, Robt. S. McKinney, S. Schleigh and J. H. Jenkins; secretary, Henry Maisch; treasurer, D. M. R. Culbreth. Executive Committee: Henry P. Hynson, Chas. Dohme and Jno. C. Muth.

The question of holding the next meeting of the association conjointly with the meeting of the Pennsylvania Association was discussed, and was referred to a committee with power to select time and place of meeting.

Brief remarks were then made by J. H. Redsecker of Pennsylvania and Caswell A. Mayo of New York, after which the newly elected officers were installed and the association adjourned.

#### A VISIT TO SHARP & DOHME'S LABORATORY.

On adjourning, the majority of the members accepted the invitation of Charles R. Dohme to visit the laboratory of Sharp & Dohme, and were shown through the extensive and handsomely fitted plant by Mr. Dohme and his son, Dr. A. R. L. Dohme.

#### Annual Meeting of the Delaware Pharmaceutical Association.

The tenth annual meeting of the Delaware Pharmaceutical Society was held in the Court House, Dover, on Thursday, May 7.

The members were welcomed to Dover by Gen. R. R. Kenney, and response was made by Clarence D. Sypherd, president of the society. The reports of the secretary, the treasurer of the Executive Committee and Standing Committees, were read and referred. The following new members were then elected:

#### NEW MEMBERS.

Clarence B. Raymond of Smyrna, Thomas F. Hammersley and Dr. George W. Marshall of Milford, George Frizzell of Henry Clay, Edgar B. Allaband of Philadelphia, William B. Sharp of Harrington, H. L. Wallace of Seaford, E. M. Vaughn of Middletown, William T. Shewbrooke of Wilmington, S. L. Kenney of Laurel, Mrs. E. R. Butler of Newark, Oscar C. Draper of Wilmington, George H. Adkins of Wilmington, Harry McDaniel of Dover, William F. Dunn of Smyrna, William B. Nock of Camden, Dr. J. M. Wilkinson of Dover, A. M. Chamberlain of Middletown and Henry Frederike of Philadelphia.

John M. Harvey, chairman of the Committee on Prize Essays, reported three papers, by H. M. Wilkinson, on "Progress in Pharmacy"; Joseph P. Williams, "Is It Profitable to Belong to Our Society?" and William T. Shewbrooke, "Window Dressing." They were read and referred to the Committee on Papers.

The Legislative Committee was instructed to prepare an amendment to the State Pharmacy Law, providing for two years' continual experience of druggists' assistants, and pass a successful examination by the Board of Pharmacy. Also providing for the registry of phar-

macists every three years. The metric system and the bill now before Congress in regard to the rank of druggist in the army and navy were discussed.

#### OFFICERS ELECTED.

The election of officers resulted as follows: Jacob Y. Foulk of Milford, president; William Poole, C. B. Raymond and S. L. Kenney, vice-presidents; F. W. Fenn, secretary; Joseph P. Williams, treasurer; T. F. Hammersley, local secretary; Owen C. Spear, E. Hoffman and N. B. Danforth, Executive Committee.

Erdman Hoffman, John M. Harvey and Joseph P. Williams were named from whom the Governor should select a successor to Mr. Hoffman in the Board of Pharmacy.

#### Louisiana Association.

The fourteenth annual meeting of the Louisiana State Pharmaceutical Association was opened in New Orleans, May 5. The meeting was called to order by President Roux, who delivered his annual address. E. Lalmont read the treasurer's report, which showed the cash receipts of the year \$479.79; total disbursements, \$257.02, leaving a balance on hand of \$222.77.

Ex-president P. M. Capdan then read the act to amend the present law existing in regard to pharmacy. Before beginning he said that the committee fully realized the importance of the act, and the best legal advice had been sought before it was placed in final form. For years the association had been attempting to do something in this line, and this year their efforts had been brought to a culminating point, and the chances were bright for success. Some of the features of the act are an establishment of an apprenticeship, such as never existed before; changing the number of the members of the Board of Examiners from five, as it exists at present, to nine, five of the members to come from the parish of Orleans; and providing for severe penalties for adulteration of drugs, etc.

The vice-president addressed the meeting by letter, in which he called attention to the Epitome of the National Formulary, which has been compiled by the Kentucky Pharmaceutical Association for the convenience of the medical profession. His suggestion that the Louisiana Association have 1,000 copies printed and distributed among the members at a nominal cost met with favor, and a committee was appointed to handle the matter.

The bill which was lately introduced into Congress by Hon. C. W. Stone, chairman of the Committee on Coinage, Weights and Measures, to fix the standard of weights and measures by the adoption of the metric system, was read by Mrs. E. Rudolph, the secretary. By the terms of the bill, after January 1, 1901, the metric system of weights and measures will be the only legal and recognized system in the United States.

The second day's session was called to order Wednesday, May 6, at 1 p. m., President Roux in the chair.

The matter of purchasing 1,000 copies of the National Formulary was discussed at some length. Mr. Lyons did not think 1,000 copies necessary, as there were only 260 doctors in the city. The books are to be distributed among them. It was decided to give ten copies to 100 pharmacists, members of the association, for distribution throughout the State.

The Committee on the President's Ad-

dress recommended that that portion of the address referring to the pharmaceutical laboratory of the medical department of Tulane University and to the Louisiana State Board of Pharmacy be eliminated. The president was congratulated upon the able manner in which he treated the subjects considered.

George N. McDuff, chairman of the Committee on Trade Interests, read a report covering the subject. The subject of competition was touched on, and the Universal Trade Association recommended. All the recommendations in the report were adopted by the association.

The third and final day of the meeting brought the convention to a close.

The retiring president, N. P. Roux, called the convention to order at 12 o'clock, and after a little preliminary discussion



E. A. BIGELOW.

The death of E. A. Bigelow, president and general manager of the J. C. Ayer Company, Lowell, Mass., was announced by Thos. F. Main at Thursday's meeting of the New York Board of Trade, and it was moved to draft appropriate resolutions of condolence and sympathy, the same to be sent to the family of the deceased and to the J. C. Ayer Company. He died at his home in Lowell, Monday, May 18, and the funeral was held May 21.

he declared the election of officers for the ensuing year in order. The vice-president, P. L. Viallon of Bayou Goula, was nominated for president and immediately there were several seconds to the nomination. It was made unanimous, and Mr. Viallon was duly elected as the chief executive of the association. The other officers elected were: First vice-president, Geo. W. McDuff; second vice-president, W. R. Duplantis; corresponding secretary, J. A. Legendre; recording secretary, Mrs. E. Rudolph; treasurer, E. Lalmont; Executive Committee, Dr. J. A. Storck, F. C. Godbold, S. E. Dannermann, T. A. Quayle, G. J. Dejan; delegates to the American Pharmaceutical Association, which meets in Montreal, Can., Dr. Bourg, H. V. Arney,

E. Lalmont, N. P. Roux, L. F. Chalin and P. L. Viallon, Sr.

#### Commencement Exercises.

#### Massachusetts College of Pharmacy Confers the Degree of Ph.G. on a Class of Twenty-one.

BOSTON, May 19.—The twenty-eighth annual commencement exercises of the Massachusetts College of Pharmacy were held in the hall of the Boston Young Men's Christian Association, on Boylston street, on Thursday afternoon, May 14. The stage was magnificently decorated with flowers and potted plants, while the colors of the class were festooned about the walls. The president, trustees, faculty and secretary of the college had seats of honor upon the stage with the members of the graduating class. Music of the most inspiring nature was furnished by the Thomas W. Henry orchestra. After an overture by the orchestra, Colonel Henry A. Thomas, private secretary to the Governor, delivered an eloquent address to the students, his subject being the "Practice of Pharmacy."

W. D. Wheeler, Ph.G., secretary of the college, then called the roll, after which John Gano Benedict, Ph.G., president of the college, presented the diplomas and conferred the degree Ph.G. upon the following-named young men:

Charles Anthony Bascom, James Henry Blake, \* Elbern Taylor Bowers, Elkanah Edward Boynton, Charles Leland Davis, \* James Edward Deuel, Leon Clifton Ellis, Willis George Guild, \* William Holbrook Hale, \* Frederick Arthur Harford, Philip Alexander Lowe, Albert David Lockhart, Arthur Clark Morey, \* Joseph Ingalls Moulton, Edward Thomas Parker, \* Frank Birtles Simmons, Arthur St. Onge, Richard Thomas Smart, Arthur Thayer, John Hupper Turner, \* Walter Alden Washburn.

\* Have taken elective courses in addition to requirements for graduation.

At the close of the exercises in Association Hall a reception was given the class in the parlors. There was a large attendance, and the friends of the graduates took advantage of the time and occasion to congratulate them on the successful termination of their college life.

#### ALUMNI DINE.

The twenty-sixth annual dinner of the Association of the Alumni took place at Young's Hotel in the evening. It was a complimentary affair, tendered to the graduating class of '96. About 100 gentlemen sat around the tables. J. S. Bonney of the Board of Trustees, and president of the association, occupied the chair. President J. G. Benedict spoke briefly on the plan to secure State aid. Colonel Thomas was the special guest, and he confined himself to anecdotes and humorous stories. C. L. Davis, president of the class of '96, spoke principally of the standing and bright prospects of the College of Pharmacy. Professor Wood of the Harvard Medical School spoke of the many important changes in the educational department of the school since he first became connected with it, 25 years ago. Hon. Gorham D. Gilman gave a few words of advice to the young men, and then spoke of his experiences in the Hawaiian Islands, where he resided for some time, and for which country he is resident consul. Among the other speakers were William Lloyd Garrison and members of the class. Professor Markoe was unavoidably absent for the first time since the association was formed.



## IN GREATER NEW YORK

New York, Brooklyn, Jersey City and Vicinity.

Fred. W. Frost, formerly with Weiss & Chubbuck, Far Rockaway, is now with W. F. McRae, 580 Tenth avenue.

Chas. L. Pierce, N. Y. C. P., '96, is now with F. E. Mills, 1107 Fulton street, Brooklyn.

Osteyee Bros., perfumers, Jersey City, have leased commodious and well located office and salesrooms at 105 Maiden lane.

F. E. McAllister has removed his wholesale seed store from 22 Dey street to very much larger and handsomer quarters at 69 Cortlandt street.

Warren B. White, formerly with Mendel Zagat, Ninth avenue and Seventeenth street, has just returned from a six months' pleasure trip to Europe.

Bartlett & Plummer have given up their Thirty-fourth street establishment and have removed the stock and fittings to 405 Fifth avenue, near Thirty-seventh street.

Frank Pond, N. Y. C. P., '95, has made a change in his position from Newark to this city, and is now at Zagat's pharmacy, Amsterdam avenue and Sixty-third street.

H. L. Bloome, one of Theo. Rick-secker's old salesmen, is now calling on the druggists of the New England States in the interests of McKenzie Brothers & Hill, manufacturers of the "Stuart Perfumes."

Percy C. Magnus of McKenzie Brothers & Hill is receiving the congratulations of his numerous friends on the recent advent into his family of a junior partner. Mother and son are reported to be doing nicely.

Dr. Frederick B. Power, formerly of Madison, Wis., and lately connected with Fritzsche Brothers, the New York branch of Schimmel & Co., is about to leave the United States to take up his residence in London.

Giovanni Cocciola, 28 years old, of 476 President street, Brooklyn, is under arrest for practicing medicine without a license. Giovanni has been arrested twice before on the same charge, and when his lawyer asked that he be paroled Justice Goetting refused.

McKenzie Brothers & Hill, the well-known essential oil distillers of 52 Water street, this city, have opened a Chicago branch at 161 Randolph street, in charge of Geo. F. Lewis, a gentleman widely and favorably known among druggists, perfumers and soap makers.

Dr. Ferdinand King, well and favorably known among physicians as the publisher of the New York *Polyclinic*, has been appointed general manager for the United States of the Ripley-Brom lithia water. The New York office of the company is at 159 West Twenty-third street.

President elect Searles called a special meeting of the officers of the Alumni Association of the New York College of Pharmacy at his residence, 59 West Sixty-second street, Monday evening, May 18. Messrs. Herold, Henning and Ebbitt responded to the call. The others ent excuses.

H. Weinlagen, the manufacturer of clinical thermometers, hypodermic syringes, etc., will remove his offices and salesroom about June 1 from 22 and 24 North William street to 227 William street, where he has taken up temporary quarters pending the erection of a handsome fireproof structure on the site of his old stand.

An order has been granted by Justice Clement of the Supreme Court directing the State Board of Pharmacy to issue a license to practice to Frederick A. Overton of Cold Spring Harbor. Mr. Overton has been in business since 1868, and has practiced in New York and New Jersey. He failed to apply for a license when the new law went into effect. The order is the first one of the kind, and many more will probably be applied for.

The name of Mariani at once suggests to all the famous wine or nerve tonic which bears the name. Not so many are aware, however, that the owner of the name, Angelo Mariani, is a prominent figure in literary and artistic Parisian life. He is a liberal patron of fine arts, and owns one of the finest libraries and picture galleries in France. M. Mariani is now in this country, having arrived in New York recently on the French liner "La Touraine."

A visitor from Indiana was very much astonished to see a sign in the window of a Sixth avenue drug store announcing a fresh importation of India loofahs at 20 cents each. Her companion assured her that they were offered at a bargain.

"In London," she said, "I have often paid a shilling for loofahs not half so good."

"But what do they use them for?"

"Why, for bathing. They are excellent for the skin."

"Well, down South we pull 'em off the hedges and use 'em for dish rags. These are just split open and the smooth side turned out. You can get all you want in Indiana for 10 cents a bushel without sending to India for 'em."

When druggist William A. Strode of Burlington, N. J., looked upon the gable end of his store and saw the date 1788 inscribed thereon, he came to the conclusion that his was the oldest establishment of the kind in Burlington. Just then druggist H. B. Weaver came to the front with 1781 inscribed on the gable end of his building, and Mr. Strode was compelled to take second place as regards antiquated structure. The popular druggists were left to enjoy their laurels a few days only, and now druggist John A. Vandegrift, Sr., justly claims the daddy of all buildings, for on the gable end of his building is inscribed the date 1720. There are still a few more druggists to hear from, but it is hardly probable that any of them will trot away with Mr. Vandegrift's honors.

Suspended above George J. Seabury's private desk in the office of Seabury & Johnson, this city, is an oil painting which illustrates in an exceptionally clever manner the dangers of tinkering with the tariff. In the foreground is a table, on which rests a book, the binding of which is torn and dilapidated. The book bears the title, "Tariff Tinkering

in the U. S. Congress." Lying on top of the book is a newspaper with the scare head, "Shut Down. Bread Famine." On one side of the book stands a glass three-quarters filled with water; on the other an empty corn cob pipe rests on an empty tobacco pouch, the whole being eloquent of hard times, which in fact is what the picture is labeled, "Hard Times."

## THE GROWTH OF THE DRUG TRADE CLUB.

To-day, May 25, the Drug Trade Club will take possession of their new and very commodious quarters at 52 and 54 John street. The marked success of the club, both socially and financially, in the quarters in Pine street, gives ample assurance that under the more favorable conditions existing on John street the organization will develop even more rapidly than heretofore. In view of the increased accommodations offered by the new club rooms the rule requiring the payment of an initiation fee was suspended for the next 50 applicants for membership, and this list has filled up so rapidly that it seems probable that still another class of 50 will have to be admitted on the same terms. The house warming of the new club rooms will take place on June 6, when an elaborate dinner will be served and the members furnished most excellent entertainment. The House Committee are now hard at work on the programme.

## Clean Streets Affect Business.

Street Cleaning Commissioner Waring attributes to the clean streets of the East Side the complaints of the druggists there that their business was dull. Every paved street is cleaned now at least once a day, 260 miles are cleaned twice a day, and because filth was not allowed to remain there was no danger to health.

## Joseph B. Frees Dead.

Joseph B. Frees, who died Tuesday in his rooms above his drug store, at 179 Sixth avenue, had worked in the same store and lived above it for 50 years. He was born in Frenchtown, N. J., in 1820; came to this city while a boy, and went to work in a drug store lower down on Sixth avenue, near what was then Amity street. After the man for whom he worked died, he opened his place at 179 Sixth avenue in 1846. In Mr. Frees' early day in the business many of the botanic medicines could be gathered within what are now the limits of New York City. This was especially true of the district known as Manhattanville, where Mr. Frees had many agents who gathered herbs for him. His drug store became known as a place where rare medicinal plants could be found. Doctors in the city and many of the druggists used to send to him for such drugs. His shop always kept its old-fashioned look. On the shelves still stand bottles which he placed there and labeled 50 years ago. Mr. Frees was never married. He was a member of Metropolitan Lodge, No. 273, F. and A. M., and his funeral was held with Masonic ceremonies.

The announcement of the coming meeting of the New York State Pharmaceutical Association is published in full on page 32, and the programme there set forth is a most inviting one. The attendance from New York and Brooklyn promises to be unusually large.



### Kings County Pharmaceutical Society Meets in Annual Session.

The Kings County Pharmaceutical Society had its annual meeting at 829 Franklin avenue, Brooklyn, Tuesday, May 12, with President Frederick H. Pamphilon in the chair. The president, in a general report, said the past year was the biggest one in the society's history, in that more money was raised and more members had been elected to the society than ever before.

Flavel N. Bliss, the secretary, said in his report that there had been 13 meetings and that 42 new members had been chosen, making the total membership 245. The total receipts were \$715, of which \$500 were given to the Brooklyn College of Pharmacy. The graduates from the latter institution numbered 33.

Treasurer Peter W. Ray reported that there was a balance of \$431.80 in the treasury.

Rudolph C. Werner, for the Committee on Legislation, made a report on the bill introduced at Albany to regulate telephone charges in this State and to empower certain State officers to revise and regulate the charges and appropriate money to pay the salary of a secretary and his office expenses. The bill was introduced by Senator Audett.

#### RAINES LAW PROBLEMS.

Mr. Werner read a letter from Attorney-General Hancock in reply to a communication from the committee putting various questions as to the powers and privileges of druggists under the Raines law. He says it is impracticable for the Attorney-General to undertake the investigation of the very many questions of a local or private nature he receives.

"Any opinion that might issue from this office on the questions presented by you," the letter says, "could have no official significance unless rendered upon the request of the State Commissioner of Excise, and, hence, the advice of any local attorney given to your society would be as good, if not better, than any that I might give. Indeed, the advice of such an attorney should be sought, especially upon that question of your letter which relates to the sale of malt extracts, etc. As to the other questions of your letter, I dare say that the State Commissioner of Excise or his deputy in Brooklyn would very promptly advise you."

#### RAINES LAW QUESTIONS.

Mr. Werner read, also, this series of questions on the excise law, with the answers given to them by District Attorney Backus and Deputy Commissioner Michell:

1. Can alcohol be sold without taking out a pharmacist's or a storekeeper's certificate?

It will be safe to have a certificate, Mr. Backus says; Mr. Michell says we must have it.

2. Do medicinal malt extracts come under the provisions of the bill?

If these extracts are not subterfuges for beer or porter and are sold in good faith by the druggists as medicinal compounds, they are exempt from the provisions of the bill. Both officers concur in this opinion.

3. If a druggist takes out a storekeeper's certificate can he keep open on Sunday for the sale of drugs?

If he keeps his stock of liquors in the room in which he conducts his drug busi-

ness during the week he must close, as the law says the place in which liquors are sold must be closed on Sunday. He may keep his stock of liquors in a room shut off from his store, which room must be closed to the public on Sunday. In that case he can keep his store open for the sale of drugs. He or his clerks must not enter the liquor room on Sunday, except for the purpose of getting liquors to fill prescriptions.

4. If a druggist has a pharmacist's certificate will he be obliged to remove his liquors from his store to another apartment?

Question answered by previous one. Liquors must not be exposed on Sunday.

The committee's report was received and approved.

#### OFFICERS ELECTED.

The following officers were elected for the ensuing year: William Muir, president; William J. Hackett, first vice-president; Thomas J. France, second vice-president; Albert E. Marsland, third vice president; Flavel N. Bliss, secretary; Peter W. Ray, treasurer; Frederick H. Pamphilon, Clarence O. Douden, Rudolph C. Werner, trustees; Charles Dennin, William Reading, F. E. Tower, censors.

As delegates to the American Pharmaceutical Association, which meets at Montreal August 12, there were elected Messrs. Dennin, DeForest, Gallagher, Cameron, Schimpf.

### NEW YORK STATE.

BUFFALO, May 18.—H. B. Gilford, former owner of the pharmacy situated on the corner of Monroe avenue and Chestnut street, Rochester, has purchased the J. C. Lung Pharmacy at 252 Lake avenue in that city. He purposes fitting up his new store in fine style, and has ordered a handsome fountain and glass counters from the Rochester Show Case Works.

Chas. J. Rosengren, 591 William street, Buffalo, is the proprietor of a new drug store at that address.

C. B. Waterman & Co. have purchased the Otis Bros. Pharmacy at Binghamton.

Mr. Riggs of the Iroquois Hotel Pharmacy, Buffalo, has made a bill of sale to his wife. Consideration, \$1.

George E. Thorpe is the new proprietor of the Yates Pharmacy, Syracuse, formerly owned by Fox & Dygert.

W. E. Thrall, recently head pharmacist at the Larned Pharmacy at Syracuse, has taken a position at the Yates Pharmacy.

Robert J. Sackett has accepted a position with the Rochester Candy Works. He will travel between Chicago and Buffalo.

The drug store of Joseph V. Mullen on Plymouth avenue, Rochester, has been closed. We understand the stock is to be disposed of.

Eli T. Hosmer of the Allen Street Pharmacy, Buffalo, has purchased a fine new 18 syrup onyx fountain, manufactured by Lippincott.

J. U. Lynde has succeeded Thomas Meredith, druggist of Jamestown. Mr. Lynde was at one time located at Buffalo, and has also been engaged in the drug trade at Wellsville.

Peter G. Siener of Rochester, assistant surgeon for the Naval Reserve, is busy arranging for the coming trip of that body. This information is gained from L. E. Treat, who states that the assistant surgeon presents a most fascinating appearance in his natty uniform.

S. V. Fitzsimons has purchased the Powers Hotel drug store at Rochester, lately owned by Curran & Goler. He has added a new 16-foot onyx soda fountain, with 33 syrups, manufactured by the John Matthews Apparatus Company. The top, which is in white and gold, was furnished by Porter Farley, and is an exquisite piece of work.

### CONNECTICUT.

NEW HAVEN, May 20.—The fact that very large quantities of alcohol are used in this State for manufacturing purposes may have something to do with the sentiment of the drug trade on the subject, for they are practically all in favor of tax free alcohol, and, consequently, opposed to the repeal of the Hoar bill. Both the Senators from this State have pronounced in favor of tax-free alcohol, and one of them, Senator Platt, has offered the McKinley bill as a substitute for the repeal bill, and asserts that he will not allow the repeal bill to be passed without precipitating a general discussion of the tariff question. The Congressmen, also, are interested in the retention of the free alcohol. No opinion has been formed by the Connecticut delegation whether or not the rebate claimed by manufacturers constitutes a valid claim against the Government.

#### Jottings About the State.

Druggist M. J. Holloran of New Britain has engaged James Kincade to act as clerk.

J. H. Barnes of Milford has made several minor improvements in his pharmacy.

Druggists Burns and Dougal of Torrington have purchased new fountains from the Low Art Tile factory of Boston.

At a recent cat show given at New Haven, Druggist P. B. Schurman, the popular Broadway druggist, exhibited his famous kangaroo cat.

Mr. Doctor, formerly with P. B. Schurman of New Haven, has opened a tasty drug store on Edgewood avenue, in the Elm City.

Oliver D. L. Burrows has severed his connection with the Groton Pharmacy, much to the regret of a large circle of friends.

Druggist Shea of the Putnam Pharmacy and Miss Darney of Worcester were married recently. The groom was formerly a resident of Worcester.

Hubert F. Pierce, clerk in C. E. Blodgett's drug store, at Portland, was the victim of an attempt at highway robbery a short time since.

F. D. Burtch of Stonington has begun making changes in the interior of his drug store, which are necessary for the reception of a handsome fountain which is soon to arrive.

Stephen Billings, the live Bridgeport druggist, was the first to take out a drug license, on May 1. This is one of the many ways of securing a free ad. in the daily papers.

Fred. W. Seibold, who has been in the drug store of G. C. Hamilton, at Bridgeport, for nine years, and during the past few months in David's Pharmacy, at Danbury, has returned to the "Hustling City" and entered Cole's establishment as clerk.

Ex-Alderman John W. Lowe, the well-known druggist at 584 Howard avenue, New Haven, is to establish a drug business at Woodmont about May 15. He has purchased a lot 100 feet front and about 75 feet deep, upon which is a small drug store formerly kept by E. P. Norcross. Mr. Lowe has purchased Mr. Norcross' stock and will reopen the pharmacy.

A new staff have taken hold of the European Pharmacy, at New Britain. The manager, B. C. Hockert, is a graduate of the Royal College of Pharmacy, Stockholm, Sweden, and has had 20 years' experience. He is registered in Illinois, New York, Minnesota and Michigan. He is the United States correspondent of several Swedish medical journals, and his letters are of such value that they are published in all the medical reviews in Germany. Mr. Hockert is ably assisted by Peter Golden, formerly of Hartford. Mr. Golden enjoys the honor of being the youngest candidate who successfully passed the examination before the Connecticut State board. Though young he has had six years' experience in the business.

#### Affairs in Maine.

John H. Hammond and John D. Keefe of Portland, Maine, have quite recently ordered new soda fountains from the Low Art Tile Company.

Frank L. Winship, who has been in the employ of the Deering, Maine, Drug Company, will open a drug store in Hoegg Block, at Portland, Maine. His place has been filled by R. C. Harmon, a veteran druggist.

Complaint is being made that the Jamaica rum sold at the State Agency's office in Auburn, Maine, is of poor quality. The complaint is filed by the State Assayer.

Extensive and needed alterations and repairs are being made in the store in Bangor, Me., recently purchased by Charles E. McIninch, for use as a drug store.

#### Trouble in Canton, Ohio.

The druggists of Canton, Ohio, are face to face with a problem beside which the financial muddle pales into insignificance. The Canton girls have perfected an organization and declared a boycott against druggists who sell cigarettes to dudes. The dudes have retaliated, and have decided to boycott all druggists who sell chewing gum to girls.

And there you are. In the meantime trade in Canton is paralyzed; but of course no one can doubt how this fight will terminate. No druggist can hesitate a moment when he must choose between dudes with cigarettes and girls with soda water and gum. The new woman is a winner—from soda to hock or anything else.

## MASSACHUSETTS.

### DRUGGIST'S NARROW ESCAPE.

Benjamin F. Bradbury, the well-known Boston druggist, had a narrow escape from being killed on the railroad near Melrose station one day recently. He was hurrying to the station, but was caught between trains going in opposite directions and thrown to the ground, and barely saved himself from going beneath the wheels. A part of his coat was cut off, but he succeeded in keeping himself from the rails. Mr. Bradbury received only slight bruises.

### CAMBRIDGE DRUGGIST KILLED.

George F. Dow, a Cambridge druggist, was thrown from his carriage on April 23 and sustained injuries that resulted in his death in a few moments. He lived on Seattle street, Allston, and carried on business at the corner of Prospect and Cambridge streets. He leaves a widow and two children. The cause of the accident was a collision between Mr. Dow's team and an express wagon. He was thrown to the ground, striking one of the rails and fracturing the base of the brain.

### ONE OF THE OLDEST DRUGGISTS.

Forty-six years ago a copartnership was formed in Haverhill by Frank C. Swan and Frank B. Cross, and the old drug business of the late Moses Nichols, at 9 Main street, was purchased. This partnership was continued until 1859, when Mr. Swan became the sole proprietor, which he continued until last month. A few years after he assumed the business he removed to 40 Merrimac street, remaining there for about 80 years, then removed to 130 Merrimac street, where he continued until he sold to George H. Pollard last month. When Mr. Swan began business in Haverhill Charles B. Emerson and R. C. Howe were drug clerks with J. R. Nichols, but Mr. Swan is the oldest proprietor in the city. For many years Mr. Swan absolutely refused to sell intoxicating liquors to any one. He entered into an agreement with other druggists not to sell, and faithfully kept his word. About seven years ago a license was given him. The old store is undergoing a thorough overhauling, and when completed will be a handsome establishment. Mr. Pollard will have for his assistant Frank G. Pollard, a brother, who is a well-known pharmacist.

### RECEIVED THEIR CERTIFICATES.

Forty-two applicants for certificates were examined by the Board of Registration in Pharmacy early in the month, and the following-named persons were successful:

Alphonse Normandin, Pawtucket, R. I.; Edward M. Ellis of West Gardner; Anton Lindgren, Worcester; Frederick K. Snyder, Pittsfield; Clifford W. Bass, Charles H. Howard, Herbert L. Erskine and Philip A. Lowe, Boston.

### Of Interest to the Trade.

An addition is to be built to the drug store of C. D. Harlow in Weymouth.

Work on the elegant new store of Fred. I. Hopkins, in the Odd Fellows' Building in East Lynn, is nearly completed and will soon be occupied.

A new store on Winter street, Boston, has been opened by Woodward, the Horticultural Hall druggist. It is in the new

Whitney Building, and has been attractively fitted up.

The entire stock and fixtures of Emerson Goldthwaite, the druggist, in Brockton, have been bought by Stillman S. Perkins. He will open a finely fitted up store at 220 Crescent street.

J. F. Fitzgerald & Co., druggists of long experience in Boston, have opened a finely fitted up store at the corner of Moody and Spruce streets, Waltham.

The Peabody Homeopathic Hospital, in the Carleton Building, on Beach street, was damaged by fire and water in an early morning blaze last week.

A building situated on Centre street, Bangor, Maine, has been leased by Mrs. Millard Foster, who has opened a drug store to be fully equipped with everything in the line of medicines.

L. O. and Harry Shurtleff of Manchester, N. H., have bought the drug business of C. E. Davis in Whitefield in that State and will conduct it under the above firm name.

Charles Rand of Portsmouth, N. H., has leased for a term of years the drug store in Chase's Block, at Laconia, and will engage in the drug business. The establishment was formerly occupied by Frank B. Elwell.

A. H. Bartlett, for the last five years with C. P. Jaynes, the Hanover street druggist, and at one time with Gilman Bros., has accepted a position with the wholesale drug house of West & Jenney, on Broad street.

J. Edson Young, a registered pharmacist, who has been in the employ of C. A. Dana, the Franklin druggist, has severed his connection there and opened a dental establishment in Medford. Mr. Young studied dentistry while studying pharmacy.

John and Leslie Buzzell of Presque Isle, Maine, were arraigned in the United States Court at Portland, Maine, last Wednesday, on indictments charging them with smuggling paris green across the New Brunswick border. Their defense is that they took the goods from another person and the box was properly marked "duty paid."

W. H. Hinds and Harris & Green of Providence, and N. T. Reiner of Centerville, who have just purchased new soda fountains from the Low Art Tile Company of Chelsea, Mass., will, we are sure, find their soda water business greatly increased this summer owing to the fact of their possessing such artistic fountains.

A. B. Wilbor, a well-known manufacturing chemist of Boston, died at his home on Kileyth road, Brookline, April 28. He was born 69 years ago in Little Compton, R. I. He came to Boston when a young man and entered the employ of his brother, the druggist, on Washington street, as a clerk. About 1850 he went into business for himself on Court street. He made a large fortune as a manufacturing chemist, a great part of it being made in the manufacture of cod liver oil emulsion.

### Mr. Faxon Down on Malt Extracts.

Boston, May 19.—Henry H. Faxon of Quincy, the foremost temperance worker in the commonwealth, has had his eye on the different malt extracts that are being extensively

advertised in and about Boston, and yesterday he stirred up the police force by an open letter sent to the chief, saying: "The druggists and grocers of this city who are selling malt extracts, so-called, should be notified at once that the sale of such liquids without a license is a violation of the statutes of the commonwealth. I have the analyses of 17 of these extracts, which show that they contain 8.35 to 8.88 per cent. alcohol, averaging 5.81 per cent. I have also 11 certificates of analyses showing from 8 to 9.86 per cent. alcohol. . . . I desire it distinctly understood that dealers in malt extracts will be attended to in the future by a constable who receives no remuneration, unless the police attend to their duties."

## PENNSYLVANIA.

PHILADELPHIA, May 20.—On May 18 a meeting of the Board of Directors of the Philadelphia Drug Exchange was held, at which the action taken by the Legislative Committee in regard to the act to amend an act to simplify the laws in relation to the collection of revenues, known as the Customs Administrative bill, was approved; this meeting was well attended, and there was not a dissenting voice raised against the protest made by the committee to the United States Senators. This committee protested against this bill in very strong terms.

The protest goes on to state that duties should be paid strictly according to the intent of the laws of the statute books; that in the case of specific duties every gallon, every ton, every pound and ounce should be accounted for, and in the case of ad valorem duties collection should be made ad valorem in fact. In its judgment the real value may be taken to be current market price at the place and on the date of shipment. It has appeared to the committee as most unjust on the part of the Government that invoices should be marked up but never marked down.

At the same meeting the Board of Directors also passed favorable resolutions in regard to the Philadelphia Museum, which in the opinion of the members is to take a permanent place in the trade of this city. This museum is to be devoted exclusively to the uses of the merchants, although the exhibits will be of interest to everybody.

### Philadelphia Notes.

Theodore Maris of the firm of J. M. Maris & Co., contemplates a trip to Europe. He proposes to take passage in the first week of June.

Charles Watson, confidential man for Robert Shoemaker & Co. for a number of years, died on May 6 from heart failure. He was found dead in bed, and on Saturday, May 9, he was buried with Masonic ceremonies.

Professor Remington, who was the delegate of the American Pharmaceutical Association to the convention of the American Medical Society, held at Atlanta, has returned. While away he also attended the Georgia State Pharmaceutical Association.

Preparations are now being made by those who are to attend the annual meeting of the Philadelphia State Pharmaceutical Association, which is to be held at Mt. Holly Spring on June 16. The Philadelphia College of Pharmacy will

be represented by Professor Trimble, Professor Remington, Joseph Crawford and William McIntire, who is chairman of this delegation.

The free alcohol question is receiving considerable attention by the various dealers in this article in this city. While their action is more secret than it has hitherto been, it is understood that considerable work is being done in the matter, with a view of defeating any adverse State legislation that may spring up. It is believed that this session of Congress will not be able to repudiate the claims that have been filed, but what the outcome ultimately will be is a question. The matter is, however, kept alive, so that the dealers will not lose interest in it, and every effort is being made to have a bill passed that will secure to the manufacturers that use alcohol in their goods a concession of the duties. It is said that this bill is now under way, and while it may not be introduced at this session of Congress, it will be taken up among the first bills when Congress reconvenes.

Charles Lippincott & Co. are working full time and with this it is a hard job to supply all their orders. This year there has been a big demand for soda water fountains, and during the last few days the following are among some of the orders filled: A. L. Besore, Seventeenth and Tioga streets; Theodore Campbell, Overbrook, Pa.; D. M. Harris, Fortieth street and Girard avenue; Economy & Dascall, 1218 Market street; I. Rothschild, 328 North Eighth street; W. M. Morrison, Roxborough; August Hohl, Fourth street and Girard avenue; George Wood, Tenth and Spruce streets; J. C. Risley, Jr., Sixth and Buttonwood streets; Marion K. Adams, 23 South Eighth street; Dr. W. A. Burns, Twelfth and Spring Garden streets; S. Zavaikos, Seventh and Market streets; Mrs. E. Bowker, 1800 South Broad street; L. S. Corson, Twenty-eighth and Oxford streets; E. M. Boring, Tenth and Fairmount avenue; Codville & Co., 184 West Girard avenue; F. A. Schock, northeast corner Twenty third and Parrish; Bruce Moyer, 4250 Lancaster avenue.

### DRUG CLUBS ORGANIZE.

The announcement that many of the drug clerks in this city have united to protect their own interests as well as to secure for themselves advances in salaries, created little, if any, surprise among employers. It is said that this association has representation in all the principal cities of this State, and upward of 70 different organizations have been formed since the movement was first started. Philadelphia seems to be the birthplace of this movement, but it is thought that nothing practical can be done in this matter for some time to come.

The league rests upon the stringent regulations thrown about the sale of drugs in this State. In order to fill prescriptions, a clerk must have undergone an examination before the State Board of Examiners, and have received a certificate of his proficiency and ability. Certificates from other States are not recognized, and a clerk from any other place, no matter what his experience might be, would not be allowed to practice in Pennsylvania until he had first passed the examination before the board of this State. Here is where the league sees a way to put employers in a tight place, and it proposes to do it as soon as enough mem-

bers have been secured to insure success. The board meets only once in three months to hold examinations. The league will watch its chance and immediately following some one of the examinations will order a strike, it is said, and druggists will find it utterly impossible to get clerks from any source whatever. Should they try to import them from other States the league would quickly make information against them for violating the law, and the imported clerks would also be made to answer for violating the State regulations. It would be three months before the proprietors could look for relief, which could not come until the next meeting of the Board of Examiners, and in a much shorter time than that, it is thought, the demand for better pay would be granted.

Throughout the State the league is said to be in a flourishing condition and growing rapidly, the only exception being found in Pittsburgh, where a spirit of jealousy has kept membership down. The branch there started out with 72 members, over a fifth of all registered clerks in Pittsburgh and Allegheny.

## OHIO.

CINCINNATI, May 20.—The troubles of the John D. Park & Sons Company and the National Wholesale Druggists' Association were revived last week by the granting of a temporary injunction in New York. It will be remembered that a short time ago Park applied for an injunction against the organization named, and the case was heard by Justice Truax. Ambrose Park, who went to New York to institute proceedings, is jubilant over the shape that matters have assumed, as he claims the business of his company has been greatly handicapped of late, but that they can now go ahead as before. A full history of the case has already been given, and further details are given elsewhere in this issue.

### CHARGED WITH COUNTERFEITING WRIGHT'S PILLS.

The owners of Wright's Indian vegetable pills caused the arrest of Joseph Sheridan, of 484 Clark street, this city, the other day, on a warrant charging him with counterfeiting labels and selling bogus medicine. An agent of the company came to this city and retained Senator-Elect Foraker as his attorney. A search warrant was issued, but the constables failed to find anything of an incriminating nature at Sheridan's residence.

### The affairs of the

### OHIO DAIRY AND FOOD COMMISSION

are still in a chaotic state, and it looks as though little work will be done during the remainder of Commissioner McNeal's term of office. As yet there has been no formal announcement of the resignation of Messrs. Fennell, Luebbing and Sterritt, although it was advised that they either pursue that course or sever their connection with the so called World's Medicine Company. It was rumored that the three gentlemen named would leave the employ of the State, but if that is their intention it is known only to themselves, as no act of theirs would lead any one to believe that they intended to pin their faith in the medicine company named. Judge Dye, who was charged with accepting a bribe of \$5,000 from A. J. White of New York, pursues

the even tenor of his ways, and still maintains that he will not sever his connection with the Ohio Dairy and Food Commission unless he is ousted by process of law. As matters now stand, no one knows what the outcome will be.

#### News About Town.

The stock of the defunct Standard Drug Company was auctioned off last week.

Billy Hale and Cy. Calvert are now known as the twin rooters. They never miss a game on Saturday.

George T. Wood, the popular traveling man with the Stein, Vogeler Company, is out again after an attack of the grip.

Twelve young women attired in yellow dresses were in the city last week advertising Bromo-Kola, a headache remedy.

Albert Vogeler, the wholesale druggist, is still confined to his home on Milton street with an attack of rheumatism.

Captain Foertmeyer's evidence in the Scott-Jackson trial did much to convict the dental student of Pearl Bryan's murder.

Dr. John F. Haynes, one of Lehn & Fink's popular traveling men, is expected here in a short time on his annual vacation.

Will. Wagner, the druggist at Seventh and Vine streets, bears a most striking resemblance to Ad. Gumbert, the Brooklyn pitcher.

James Flannery, formerly clerk for Ed. Keeshan, has bought B. C. Buettel's store at Gest street and State avenue. The place will be refitted.

A new pharmacy has been started at Cedar Grove, Ind., by Willhoff & Gingle. The latter has just graduated from the college at Gambier, Ohio.

J. H. Goodman has bought out the well known drug store of H. Eichler, on McMillen street, Walnut Hills. Mr. Goodman formerly clerked down town in several stores.

Mrs. Bertha Cox, a Southern lady, visited local druggists a few days since in the interest of Colgan's Taty Tolu. Mrs. Cox is a hustling business woman, and she made many friends during her stay in Cincinnati.

There is considerable rivalry between J. H. Linsch, the St. Bernard druggist, and Mayor Schuloff of that village for the vacant postmastership. The former stands well with the boys and it is thought that he will land it.

Prof. Charles T. P. Fennel and Johnny Bauer, the druggists at Sycamore and Milton streets, are among the delegates who will go to the Republican National Convention, at St. Louis. They will go with the Blaine Club and will march in the Mound City.

#### Damage Suit Against the Ohio Food Commission.

COLUMBUS, O., May 23.—It is stated positively that A. J. White, manufacturer of Paskola, is to bring suits for damages, in addition to those already begun by him, against F. B. McNeal, Dairy Commissioner of Ohio; G. G. Luebbling of Cincinnati, deputy inspector; Prof. C. T. P. Fennel of Cincinnati, the chemist of the department; ex-Judge Amos Dye of Cincinnati, attorney of the department, and Dr. Sterrett, the drug inspector of Ohio.

Dr. McNeal states that he himself caused the suits against Paskola to be instituted in the line of his official duties, and that he has no fear of any suits which might be brought against him.

When asked for a statement in regard to the above dispatch, Mr. White replied through a representative that "he must decline to speak for publication." He refused to be interviewed on the subject.

### MICHIGAN.

DETROIT, Mich., May 15.—James Vernor, the well known Detroit druggist will go out of business. For 80 years his store has been a landmark at the corner of Woodward avenue and Clifford street. It will shortly be torn down and a big block erected in its place. Mr. Vernor is selling off his drug stock, and will hereafter devote his attention to the manufacture of ginger ale.

Mrs. J. T. Gardner of Ewen, Mich., has removed her stock to Walker, Minn.

Herbert A. Fisher of Battle Creek has sold his store to Frank C. Beird of the same place, who will continue the business at the old stand.

Noble Whalen has purchased the stock of Patterson's drug store at Kalamazoo, Mich., and removed it to Bloomingdale, Mich., where he has engaged in business.

The McDonald drug stock at St. Johns, Mich., was recently inventoried and sold to Roy Moss of Maple Rapids, who has removed it to Middleton, Mich., and opened a drug store there.

The Michigan State Board of Pharmacy still pursues the violators of the law. The latest victims heard of are: V. W. Cole and George Eckle, both of Petoskey. Cole was the proprietor and Eckle a clerk, and both were unregistered. Each was fined \$10 and costs.

The Kola Medicine Company of Detroit, located at 582 Michigan avenue, have filed a chattel mortgage amounting to \$9,500 in favor of Wright D. Smith, treasurer of the company. The mortgage covers the stock, patents and formulas of the company, and is signed by F. H. Hassler, president; W. H. Allen, secretary, and Wright D. Smith, treasurer.

The partners in the Northwestern Medicine Company, a wholesale concern at Clare, had such a disagreement that they concluded to have a receiver appointed and wind up the business. C. H. Sutherland, cashier of the Clare County Savings Bank, was appointed. The financial condition of the company is all right, the assets being about double the liabilities.

A unique window display was lately seen in the store of Mr. Curran at St. Joseph, Mich., consisting of a large collection of oriental and European curios, gathered by W. F. Sesser, who has returned from an extended sojourn in foreign lands. There were also a series of interesting photographic views. The collection made Mr. Curran a good advertisement.

A man giving the name of Dr. Williams, and claiming to be a salesman for Parke, Davis & Co. of Detroit, was arrested in Cincinnati recently, charged with robbing a woman of \$278. William H. Warren, who has charge of Parke, Davis & Co., says that he is some scamp who is using the name of Mr.

Williams to carry on his fraudulent schemes. Mr. Williams is an old and trusted employee.

Wallace L. Ballou, a well known druggist at Grand Rapids, died recently of inflammatory rheumatism. He was a member of the Bridge street firm of Ballou & Elderfink, and a stockholder in the mills of the Ballou & Winchell Paper Company. He was a member of several fraternal societies, and his funeral was conducted by the Knights of Pythias. He left a young widow.

T. P. Robb, who has been doing business at 808 Monroe street, Toledo, Ohio, as the Philip Lorenz Perfumery Company, has made an assignment to Philip Dotson to wind up its affairs. The liabilities are fully covered by the assets, but Mr. Robb had not sufficient capital to push it. Mr. Robb's perfumes were once among the leading goods, and were awarded first prizes at the Paris Exposition and at the Centennial.

### ILLINOIS.

CHICAGO, May 19.—F. S. Tarbill & Co., retail druggists at Blue Island, Ill., and the Chicago wholesale drug house of Lord, Owen & Co., are made defendants in a suit for \$5,000 damages filed in the Circuit Court by the administrator of the estate of the late Edward Hermer of Blue Island. February 8 last Edward Hermer was ill. Max Hermer, his brother, the declaration says, went to the drug store of Tarbill & Co. with a prescription which read: "10 gran. Salzaures Chinin." The prescription was filled, but it is charged that instead of preparing 10 grains of hydrochloride of quinine, Tarbill & Co. gave to Max Hermer 10 grains of morphine. This was administered to Edward Hermer. The latter left surviving him his father, mother, one sister and one brother. By reason of the death of their son and brother the court is told that the parents are deprived of their means of support and the children of their education. It is claimed that Lord, Owen & Co. sent morphine instead of quinine to Tarbill & Co. through carelessness, and they are therefore made parties to the suit.

#### A NEW TAX FOR DRUGGISTS TO PAY.

At the last meeting of the City Council an ordinance was introduced requiring druggists to take out a license at a cost of \$25, and those who sell liquor for medicinal purposes \$250. Nothing was done beyond the introduction of the measure, and it is expected that it will share the same fate as its predecessors. The subject has been broached a number of times and nothing has ever been done. It is believed that this measure was introduced at the instance of the Liquor Dealers' Association, acting on the theory that drug stores are selling liquor for use as a beverage, and while this may be true in some few cases, the majority of the druggists are careful to sell for only legitimate medicinal purposes. Should this ordinance pass, many druggists would be compelled to give up selling liquor in any form.

At a meeting of the Chicago retail druggists, held on Friday, May 15, in regard to this ordinance, the following resolution was passed unanimously:

Whereas, An ordinance is now pending in the City Council fixing the license fee of retail druggists at \$25 per year, which amount is wholly out of proportion to the sum paid in other similar lines of business; and

Whereas, This fee is purposely made large

because of the unreasoning assumption that the business of selling liquor by druggists (notwithstanding the legal restriction that sales by them shall be confined to medicinal, mechanical and sacramental purposes), is a source of large revenue and enormous profit; and

Whereas, The said fee of \$25 is unjust to the large majority of druggists, who sell so little liquor for any purpose that the payment of the annual internal revenue tax of \$25 is already an onerous burden; and

Whereas, The influence of this association, which has always been exerted to keep the liquor sales of druggists within legitimate bounds, will be seriously crippled in consequence of an inevitable desire to get back by proper or improper means the sum extorted for license, in plain violation of the laws of justice, thereby degrading the practice of pharmacy; therefore, by the Chicago Retail Druggists' Association be it

Resolved, That the president appoint a committee, consisting of as many members as he may deem best, to present the above and such other pertinent facts as they may deem proper, to the Committee on License, and, if necessary, to the Council, and convince them of the injustice and unreasonableness of the proposed ordinance and secure its defeat.

In accordance with the resolution the following were appointed a committee: E. F. Brill, Louis Lehman, Victor Kramer, W. G. Morris, E. Challman, Thomas Bronson, A. C. Musselwhite, George R. Baker, John F. Coleman, F. M. Fox and John H. Klowaki.

#### News Notes.

O. & W. Thun have opened an office here, at 8 Wabash avenue, for the sale of their well known specialty, Tangle-foot.

Mrs. Gervaise Graham has removed her offices and laboratory from 1244 to 1250 Michigan avenue. The new location is a desirable one in every way.

C. G. Fouceck, druggist, at Eighteenth street and Center avenue, has opened a new store at the corner of Twenty-sixth street and Lawndale avenue.

The Evilo Company, manufacturers of perfumes at 358 Dearborn street, have made an assignment to Albert J. Bradford. Liabilities, \$3,600. with \$2,000 assets.

The Illinois Chemical Company have been incorporated by William H. Meserole, Cornelius D. Vreeland and William H. C. Higgins, with a capital of \$50,000.

Among the recent Illinois purchasers of Low Art Tile fountains are: C. Wheeler of Peoria, J. T. Maloney of Aurora, L. C. Hatcheck, M. A. Popworth and C. Shotwell & Co. of Chicago.

J. F. Wallach of 3800 Cottage Grove avenue, pleaded guilty in Judge Baker's court to employing an unregistered pharmacist. He was fined \$75. On three other complaints the cases were dismissed.

Fred. W. Moeller, John T. Moeller and F. Charles Lohr were also indicted for employing an unregistered pharmacist, at 298 Milwaukee avenue, and on pleading guilty were fined \$25 each by Judge Baker. Six other charges of violating the pharmacy laws were dismissed.

J. P. Kolb and J. H. Kahn, until recently with the Elkin Drug Company, at the corner of State and Van Buren streets, have opened the Deering Pharmacy, at the corner of Clybourn and Fullerton avenues. Their bottle outfit was purchased from Whitall, Tatum & Co., through John F. Matthes, the western manager.

P. H. Mallen, until recently secretary of the Gross & Delbridge Company, has

opened a homeopathic pharmacy at 49 East Madison street, under the firm name of P. H. Mallen & Co., the premises that the Gross & Delbridge Company occupied for so many years. The entire fixtures, which are of quarter sawed oak, were made by the Union Show Case Company of Chicago, and the bottles and shelf ware were supplied by the Chicago branch of Whitall, Tatum & Co.

The graduating class and faculty of Rush Medical College were entertained by the Searle & Hereth Company, at their laboratory, on Tuesday, the 12th inst. After luncheon had been served, the visitors were shown through the laboratories of the company by the officers. About 200 of the graduates attended, and had an excellent opportunity to see how the various lines of goods are made. There was an attendance of about 200 students, in addition to a number of the professors.

### MISSOURI.

St. Louis, May 18.—The time for the annual meetings of the State and national pharmaceutical associations is rapidly drawing near, and from all indications St. Louis will be well represented on both occasions. Pharmacists are already arranging for relief clerks, etc., for the Excelsior Springs meeting from June 9 to 12. Many who have remained at home on account of hard times for several years expect to make up for lost time this year and take in both State and national meetings. Several of our old time pharmacists feel that they cannot attend both meetings, so they will be on hand in August at the meeting of the American Pharmaceutical Association.

#### MAY CHANGE FROM EXCELSIOR SPRINGS.

The association has held its meetings at Excelsior Springs for some five or six years, and while it would be hard to find a more agreeable place for meeting, there is a growing dissatisfaction on the part of the pharmacists in the eastern portion of the State. They want to see the meeting held nearer home. Heretofore the trouble has been to find a suitable place, but a pleasure resort but a short distance from St. Louis has been found, which now seems to offer ample facilities, and it is quite probable that the place for meeting next year will be changed.

#### APOTHECARIES' SOCIETY.

A meeting of the St. Louis apothecaries' organization was held at the College of Pharmacy building, Tuesday, May 11. Each member of the old society was sent a postal card requesting him to be present if possible. The number of members who actually attended the meeting was exceedingly small. Various plans of dealing with the cut rate question were discussed. It had been rumored that certain of the old time "cutters" had tired of their evil ways and would be on hand with propositions of peace and reform, but the report was either false or their hearts failed them, for none appeared.

#### CO-OPERATIVE MANUFACTURING.

The money has been raised and papers of incorporation are being drawn up for what will be known as the St. Louis Retail Druggists' Pharmaceutical Mfg. Company. There will be a capital stock of \$2,000, divided into 200 shares

at \$10 each, to be held by retail druggists only. Their plan of operating will be very similar to the one inaugurated in Chicago. The preparations made will be advertised in the daily newspapers and otherwise throughout the city. Each member will put up a forfeit to maintain the standard price. The old members of the Apothecaries' Society are at the bottom of it. Soon they will meet and elect officers, incorporate and be ready for business. All the druggists in the city—with possibly one or two exceptions—are being asked to subscribe. They expect to be ready for business in about a month.

### Review of the Wholesale Market.

NEW YORK, May 28, 1896.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The fortnight under review has developed no special activity in any of the several departments of Drugs, Dyestuffs and Chemicals. The business passing partakes largely of a jobbing character, and the distribution of supplies appears to be most active between jobbers and retailers. Importers, on the other hand, do not find business up to their expectations, and some complaint is heard, both as to trade conditions and the slowness of collections. The two absorbing topics of interest in the wholesale trade at present are the Park suits and the fate of the free alcohol measure in the United States Senate. Regarding the first, it is not thought likely that John D. Parke & Sons' Company will be any more successful in obtaining a permanent injunction in New York than they were in Ohio two years ago. As to the free alcohol section in the tariff bill, its repeal is generally conceded by those who were most active in their efforts to have it retained on the statute books. Both matters were brought up for discussion at a meeting of the Drug Trade Section of the Board of Trade last Thursday, and suitable action was taken in each to provide for contingencies. There have been about the usual fluctuations in prices, a few of the changes being influenced by the troubles between the natives and the military authorities near the sources of supply in East Africa. Among the articles affected may be mentioned Gums, Acacia and Senegal and Calumba Root. Other changes are tabulated below, as follows:

#### ADVANCED.

Acetanilid,  
Balsam tolu,  
Buckthorn bark,  
Cape aloes,  
Socotrine aloes,  
Gum arabic,  
Gum Senegal,  
Insect flowers,  
Flake manna,  
Oil camphor,  
Oil clove,  
Oil tansy,  
Calumba root,  
Gentian root,  
Jamaica ginger,  
Kava kava,  
Celery seed.

#### DECLINED.

Citric acid,  
Cream tartar,  
White arsenic,  
Copperas,  
Gum chicle,  
Shellacs,  
Menthol,  
Oil anise,  
Oil cassia,  
Oil citronella,  
Oil cubeb,  
Florentine orris,  
Senega root,  
Sumac,  
Olive oil.

#### DRUGS.

Alcohol is less firm, and grain has sold in the interval down to \$2.31 in round lots. We quote the range from \$2.81 to \$2.83. Wood alcohol and alcoholene remain quiet though without quotable change.



# American Druggist and Pharmaceutical Record.

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We are not responsible for any money paid to agents. All communications should be addressed to the American Druggist Publishing Co., 62-68 West Broadway, New York, and all remittances made payable to them.

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## Publisher's Announcement.

ONE HUNDRED AND EIGHTY-SEVEN advertisers used space in the special issue of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD for August 25, 1895, among whom were the following prominent firms:

APOLLINARIS COMPANY,  
ANTIKAMNIA CHEMICAL COMPANY,  
CALIFORNIA FIG SYRUP COMPANY,  
CUDAHY PHARM. COMPANY,  
EIMER & AMEND,  
FAIRCHILD BROS. & FOSTER,  
JULIUS FEHR,  
E. FOUGERA & Co.,  
FOX, FULTZ & Co.,  
E. J. HUSSEY & Co.,  
JOHNSON & JOHNSON,  
LAMBERT PHARMACAL COMPANY,  
LEHN & FINK,  
H. K. MUFORD & Co.,  
NORWICH PHARMACAL COMPANY,  
PARKE, DAVIS & Co.,  
SCHERING & GLATZ,  
SCHIEFFELIN & Co.,  
SCOTT & BOWNE,  
SEABURY & JOHNSON,  
SEARLE & HERETH COMPANY,  
FREDERICK STEARNS & Co.,  
UPJOHN PILL & GRANULE COMPANY,  
HENRY K. WAMPOLE & Co.,  
WM. R. WARNER & Co.,  
WHITALL, TATUM & Co.,  
JNO. WYETH & BRO.

So far, all the above named firms, and over 150 others, have contracted for space in the special Twenty-fifth Anniversary number, 80,000 copies of which will be issued August 25, 1896.

None of these shrewd advertisers could have been induced to take space in another issue if the first insertion had not proven a good investment.

Among new advertisers who have taken space in this issue are the following:

ANHEUSER-BUSCH BREWING ASSOCIATION,  
ALTA PHARMACAL COMPANY,  
BOEHRINGER & SOEHNE,  
DR. CARTER MEDICINE COMPANY,  
THE G. F. HARVEY COMPANY,  
IMPERIAL GRANUM COMPANY,  
N. Y. QUININE AND CHEMICAL COMPANY,  
PHENIQUE CHEMICAL COMPANY,  
PEACOCK CHEMICAL COMPANY,  
POMEROY COMPANY,  
STALLMAN & FULTON,  
SULTAN DRUG COMPANY.

We have only a few choice locations left, but have ample room for advertisements taking the run of the paper. This number will be filled with valuable matter, including the announcement of the awards in our \$200 prize contest, and will be read, preserved and treasured by a select list of Thirty Thousand druggists in the United States.

## THE ST. LOUIS DISASTER.

WE present in our news columns a full and graphic account of the extent of the damage done to the property of the druggists in St. Louis by the terrible cyclone which recently swept over that town, and in view of the great loss of life which was sustained, it is a matter for congratulation that no druggists were among those killed. The sympathy of the entire country has gone out to St. Louis, in her hour of distress, and the drug trade of the United States will be pleased to learn how slightly, save in some few instances, their fellow druggists have been affected. The reassuring words from many wholesale and manufacturing druggists which are published in our news columns will convey most welcome and comforting assurances to the drug trade all over the United States of the welfare of their confrères in St. Louis.

## SODA WATER ADVERTISING.

WITH this issue we begin a series of special articles on soda water advertising which will be continued throughout the summer and will offer a number of practical suggestions to the dispenser of soda water. These papers, though they will appear in our "Business Hints," will not interfere with the regular department work which has made that portion of this journal so popular with the most progressive druggists of the United States.

In our last issue the editor of our "Business Hints" gave his opinion on the use of the omnipresent humorous illustrations as an aid to advertising. Mr. MANNING is doubtful of the wisdom of resorting to this means of attracting attention especially where so grave a matter as drugs is the subject of the advertisement. A contributor takes issue with him on this question and as there is something to be said on both sides of every subject, Mr. MANNING very cheerfully accords the space in his department necessary for the presentation of the article, and does this with all the more pleasure since the subject incidentally treated of, the advertisement of soda water, is so particularly opportune.

## THE PHARMACY OF THE NATIONAL FORMULARY.

### II.

IN place of the granular effervescent compounds of caffeine, potassium bromide, etc., which figured in the previous edition of the National Formulary we find general formulas for the convenient preparation of effervescent powders. To facilitate the preparation of these, three new compounds have been introduced, viz: Saccharated Citric Acid, Saccharated Sodium Bicarbonate and Saccharated Tartaric Acid. A careful examination of the merits of these additions to the Formulary will establish their right to a place in the work. While no formulas are included for effervescent granular preparations the compilers of the Formulary have given explicit directions for granulations when such are wanted. No excipient is prescribed for the massing of the granular powders, the water of crystallization contained in the citric acid being deemed sufficient to supply the necessary moisture. We may observe that we have tried this method in the preparation of such quantities as are usually made in the pharmacy and have found it less satisfactory than the alternative process, which provides for the use of alcohol as a moistener.

The formula for *Elixir Adjuvans* is copied into the revised edition of the Formulary without change of any kind. It has always seemed to us that this elixir is unnecessarily loaded with extractive matter and is somewhat out of place among elixirs.

A welcome change is noted in the substitution of Aromatic Elixir for Adjuvant Elixir in the various elixirs of bromide salts. The precipitation of the glycyrrhizin contained in the glycyrrhiza of the Adjuvant Elixir formerly used, through reaction with the acid of the elixir, always resulted in an unsightly compound.

It would be interesting to know what prompted the revisors to retain such a polypharmic compound as Compound Cathartic Elixir, which is certainly out of place among elixirs, and if retained at all should be classed among mixtures. *Elixir Digestivum Compositum* is a welcome addition to the list of formulas of its kind. It is intended to furnish a product to replace the widely advertised article sold at a fancy price. We are sorry we cannot compliment the Revision Committee on their formulas for Eriodictyon compounds. The formula given for *Elixir Eriodictyi Aromaticum* does not furnish a permanent preparation and its keeping properties can only be secured by the addition of a

large amount of alcohol. The matter, however, is of little importance since the elixir has no extended sale, the Syrup being preferred by prescribers. The formula for the latter has not been changed, notwithstanding the dissatisfaction which exists with respect to the appearance of the finished product, which cannot be called an elegant pharmaceutical. Aromatic Syrup of Eriodictyon is reputed one of the most effective of the various agents used to disguise the taste of quinine and its reputation has probably been well earned, but we do not think its masking properties would be lowered by paying some attention to the appearance of the finished syrup and it certainly would not be difficult to provide for a clear and pleasant looking compound. The Glycerite of Eriodictyon sold by manufacturers under the name Aromatic Fluid Extract of Eriodictyon is a superior preparation in many respects; it keeps better, for one thing, and instead of deteriorating, improves with age, besides being four times the strength of the syrup and affording a convenient means of extemporizing the official preparations.

The requirements of the American Pharmaceutical Association for the popular Elixir of Phosphate of Iron, Quinine and Strychnine have heretofore been two grains of phosphate of iron and one grain of quinine to the dram. In the new edition these proportions are reduced one-half and the amount of strychnine has been nearly doubled. The present formula will be found to yield a satisfactory preparation, though we see no advantage in the substitution of the alkali of strychnine for the salt. That unstable preparation Elixir of Iron, Quinine and Strychnine in which the tincture of citro-chloride of iron is an ingredient is retained without change. When first made this elixir presents an attractive appearance, but it soon loses its beautiful green color and deposits a copious dirty yellow precipitate.

It will be observed that the fluid extract of gentian is now ordered in place of the solid extract in formula 78, and the elixir is now treated with hydrated oxide of iron for the removal of the astringent principle. The process is relatively successful, but is, in our opinion, unnecessarily cumbersome. Egg albumen serves the purpose equally as well and is much more expeditious.

Nobody who has had experience in the filtering of solutions containing any considerable quantity of fluid extract of liquorice will welcome the new formulas for Elixir of Glycyrrhiza and Aromatic Elixir of Glycyrrhiza. The use of either glycyrrhizin or purified extract of liquorice is much to be preferred over the U. S. P. fluid extracts, since they yield preparations which can be more easily

filtered and which have superior keeping properties.

Paraldehyde offers certain difficulties to the compounder and we think the editors of the Formulary are entitled to some praise for the very satisfactory formula which they have given us for Elixir of Paraldehyde, designed to produce a 25 per cent. elixir and the product is all that could be desired both as regards appearance and palatability. The same cannot be said, however, of the two elixirs of cascara sagrada, and we fail to see how preparations made according to the formulas given are to compete successfully with those of the wholesale manufactory. This also applies to the formula for Aromatic Fluid Extract of Cascara, which has failed in our hands to yield a preparation equaling the aromatic extracts of the market. The experiments of FRANK EDEL with this preparation (reported in this journal) fairly demonstrated that the sweetening agent employed by manufacturing pharmacists was saccharine, and the process recommended by him and afterward reported by LUTHER F. STEVENS to the Kings County Pharmaceutical Society yields a superior product, and one more nearly resembling the popular preparations of manufacturing firms. The use of liquorice in No. 40 powder is objectionable and it would be better to substitute for this in proper proportion the purified extract of liquorice. With this change and the addition of four grains of saccharine to the quart little would be left to be desired.

### Our Circulation in All America.

In all America no other drug, chemical and pharmacy publication has credit for so large a circulation as is accorded to the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, published semi-monthly at New York, and the publishers of the American Newspaper Directory will guarantee the accuracy of the circulation rating accorded to this paper by a reward of \$100 payable to the first person who successfully assails it.—*Printers' Ink.*

### Excellent Results from a Single Insertion.

AMERICAN DRUGGIST PUBLISHING COMPANY, 65 West Broadway, City.

GENTLEMEN: In renewing our advertisement for the next issue of your esteemed publication, we would take occasion to testify to the excellent results we have experienced from a single insertion of our Victorian Violet Perfume advertisement in the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

The replies received have been far beyond our expectations.

We are, very truly yours,

(Signed) TARRANT & Co.

W. A. HOCKEMEYER.

NEW YORK CITY.

## Dr. Charles O. Curtman.

### A REMINISCENCE.

BY CHARLES RICE, PH.D.

*Vir bonus et sapiens qualem vir  
repperit unum*

*Milibus e cunctis hominum con-  
sultus Apollo.*

—Ausonius.

THE unexpected news of the decease of Dr. Charles O. Curtman, Professor of Chemistry at the Missouri Medical College, which occurred at his home in St. Louis on the twenty-second day of April last, has sadly grieved his many friends, and has cut short many a hope of help and benefit to be derived from future work and researches of the departed. The writer does not attempt to give a biography of Dr. Curtman at this time, but desires merely to put on record those reminiscences of the intercourse between himself and the departed which stand out more prominently in his memory, as a slight contribution to the honorable record of his departed friend.

The writer has had the privilege of corresponding occasionally with Dr. Curtman for some thirteen or fourteen years, but his first personal meeting with him took place at Washington, in May, 1890, during the meeting of the Pharmacopœial Convention. At the very first meeting Dr. Curtman's earnestness, combined with a genial sprightliness and vivacity, made a most pleasing impression upon the writer, and during the next few interviews and conversations the latter learned to appreciate Dr. Curtman's extensive practical experience, as well as his depth of knowledge in various—even the less cultivated—departments of science and natural history. But it was only after Dr. Curtman had become a member of the Committee of Revision that the writer came to realize the full worth of the man whose profound knowledge and skill, sound judgment, and resourcefulness under the most varying, and sometimes trying, circumstances manifested themselves whenever he was called upon to give his advice or to act. There are probably but few persons, outside of his family or inner circle of intimate friends and associates, who had the opportunity which the writer enjoyed of witnessing such a faithful and prompt execution of accepted tasks, even when they interfered with personal comforts during the most trying seasons of the year. From the very beginning to the end of the work of revising the Pharmacopœia—May, 1890, to August, 1893—he never failed to respond to any and all calls made upon his knowledge and time. As is well known, the principal department which fell to his share—in association with Dr. Frederick B. Power, whose valuable service and participation constitutes him the worthy compeer of the deceased—was the revision of the reagents and analytical methods, and that of the text of the inorganic chemicals. For this department he was pre-eminently fitted, not only by his long experience as a teacher, but also by his logical mind, which loved to unravel unsolved problems. The voluminous reports rendered by him and Dr. Power, all of which were communicated to the members of the Committee of Revision in circulars, amply testify to the extent of the work performed by this sub-committee. Many portions of these reports are even now of interest, particularly where they recount the experiments

conducted to settle doubtful points. It is hoped that an opportunity will present itself in the future to publish such extracts from these reports as have a permanent value.

The personal and official letters of the deceased—those addressed to the writer covering many hundred pages—faithfully represent his character, as well as the moods affecting his mind or spirit at the time of writing. This is, of course, a

against opponents, or when he criticised what he regarded as erroneous or improper. Whenever he was convinced that he was right in any particular case or argument, he was practically immovable in his decisions, allowing of compromises only in extreme cases where no other course was left open. The writer has himself had many an argument with the deceased on various matters of more or less importance, and he has actually enjoyed these tilts until one or the other came out victorious. Dr. Curtman had no love for men of a vacillating turn of mind, or for those of shallow or superficial knowledge who pretend to more than they are entitled to. The writer can readily understand why he was so highly esteemed by his students. They were evidently impressed by his earnestness and eagerness to make their minds fully receptive to the facts he desired to teach them. It was remarkable how clearly and concisely the deceased could, when occasion demanded,



natural trait, but it is often purposely suppressed, upon diplomatic grounds, when a writer tries to conceal his real thoughts under a heap of shallow words. This was not Dr. Curtman's mode of writing letters. Occasionally, when writing in a lighter tone and not engaged in a serious argument, he would interlard some pun or witticism, always most appropriate to the subject, and highly enjoyable to the reader. At other times he would adopt a serious, grave or even combative style, particularly when he wanted to defend his views or opinions

explain and make intelligible any law of nature or other subject from the domain of physics and chemistry.

In Dr. Curtman the professions of medicine and pharmacy have lost an indefatigable investigator and an exemplary teacher. And the circle in which he moved has lost in him a champion of right and truth, and a faithful friend, ever ready to come to the assistance of those who needed his aid and advice.

As such the writer will always remember him with gratitude.

New York, May 22, 1896.

Written for the  
American Druggist and Pharmaceutical Record.

### HARDING'S FORMULA FOR MERCURIAL OINTMENT.

In the AMERICAN DRUGGIST of May 25 L. A. Harding gives a formula for the preparation of mercurial ointment which directs the mercury to be extinguished by shaking it with an ethereal solution of "gum" benzoin and "oil of sweet almonds."

The author states that by this method mercurial ointment may be made in from one to two hours. This formula is offered as an improvement on the official process, presumably because the mercury is more readily extinguished, and that "for various reasons the use of oleic acid as a means to aid in the extinguishment of the mercury is not the most advisable procedure."

Some eight years ago I published what was called "a ten-minute process for preparing mercurial ointment," in which the mercury was extinguished by one-fifth its weight of hydrated wool fat, replacing that much of the official vehicle. This process worked very satisfactorily for smaller quantities not exceeding 100 gm., and was adopted by many physician-specialists who, aware of the character of "the stuff" ordinarily sold as blue ointment, directed the pharmacist to prepare the ointment direct from the metal. With the advent of the U. S. P. VII., however, we began the use of oleate of mercury, and found that it not only extinguished the mercury more quickly than did the wool fat, but that it was more easily manipulated. During the two years past the students in the dispensing laboratory have each made 20 gm. of the ointment inside of ten minutes, each specimen being examined by a lens magnifying 10 diameters.

The official process should be modified so as to direct that after the mercury has been thoroughly triturated with the oleate, about 5 per cent. of the mixed fats should be added and trituration continued, when the extinction of the globules will be greatly facilitated, and by the subsequent incorporation of the remainder of the vehicle be completely affected.

It is not the oleic acid which extinguishes the mercury, but the insoluble oleate which separates from the excess of oleic acid in the official oleate of mercury. To extinguish mercury it is essential to triturate it with a solid which will divide the globules and afterward disintegrate them. For the same reason I have modified the official process for mercurial mass so that it may be made in a few minutes. The oleate of mercury must be thoroughly mixed, the heavy portion, in fact, should be used when desired for making mercurial ointment.

C. S. N. HALLBERG, PH.G.

CHICAGO COLLEGE OF PHARMACY OF THE  
UNIVERSITY OF ILLINOIS.

### Emulsion of Bromoform.

Bromoform.....48 drops  
Expressed oil of almond.....20 gm.  
Powdered tragacanth.....2 gm.  
Powdered acacia.....4 gm.  
Cherry laurel water.....4 gm.  
Distilled water.....120 ccm.

Add the bromoform to the oil of almond and emulsify with the gums after the usual method. This affords a good method of administering bromoform in a palatable form.

Written for the  
American Druggist and Pharmaceutical Record.

### COLORS FIRES FOR "THE FOURTH."

BY GALEN, JR.

THE use of colored fires in public celebrations of important events does not date back farther than the thirteenth century, when we first find authentic mention of their introduction into Europe, the citizens of Florence being among the first to utilize them for this purpose. The secrets of their manufacture were, however, well known to the Chinese and the Hindoos in remote times. Fireworks figure quite largely in the various religious rites of the Chinese. With them no religious ceremony is complete without offerings of this description to their gods, and for the overthrow of evil spirits. We have records of their use in China for these purposes as far back as the seventh or eighth century before the birth of Christ.

#### FIREWORKS IN AMERICA.

The use of fireworks in this country in celebration of Independence Day was probably prompted by the similar form of celebration observed in England on Guy Fawkes Day (November 5). In many of the Southern States of this country Christmas Day is made the occasion for the display of fireworks, a fact which is probably due to the influence exerted by the Catholic creoles, with whom Christmas was a day of feasting and merriment, instead of a day of fasting and prayer, as with the Puritans of New England.

A notable decrease in the consumption of colored fires has resulted of late from the introduction of the elaborate displays of pyrotechnics which are now features of so much attraction and importance at the great summer resorts. The custom of celebrating the Fourth by the burning of colored fires, rockets, Roman candles, etc., is, however, still quite prevalent throughout the country, and pharmacists are frequently called upon to prepare them. A few hints regarding the composition of the different colored fires and illuminating compounds will therefore be appreciated.

The sale of colored fires can be pushed to some extent by judicious advertising. A suggestion for an appropriate form of advertising for these compounds is printed in connection with this article in our department of "Business Hints."

#### GREEK FIRE.

A form of fireworks was utilized by the ancient Greeks in the compound called Greek fire. The liquid known under this name is variously supposed to consist of mixtures of "saltpetre, sulphur, and possibly petroleum or pitch," but the fire cannot be imitated by any mixture of the kind described. The nearest imitation of Greek fire that has been produced is made of dissolving phosphorus in carbon disulphide, but as this forms a highly dangerous liquid to experiment with, we shall refrain from going into particulars regarding its manufacture.

#### LIGHTNING PAPER.

A novelty in firework effects may be made by the use of lightning paper. This consists essentially of pyroxyllon or gun paper, and is made by immersing unsized white paper (Swedish filter paper preferably) in a solution of nitric and sulphuric acids. First procure a large flat dish, just large enough to hold the pieces of paper. Fill the dish three quarters full

with a solution composed of four parts (by measure) of sulphuric acid and five parts of nitric acid. Mix the two acids well by stirring with a glass rod, and when the mixture has cooled, take one of the sheets of paper, immerse it in the solution, and let it remain for ten minutes. Remove it by the aid of a glass rod, and place it in a large pan under a tap of running water, where it should be washed for about half an hour, or until every trace of acid is removed from the paper. After being dried the papers are immersed in solutions of different chlorates according to the color of fire desired. A saturated solution of strontium chlorate gives a crimson color; lithia, a beautiful rose pink; barium, green; copper, blue; potassium nitrate, violet.

When small pellets of these papers are lighted at one point by a flame and then thrown into the air, a flame of intense colored light is produced, while the combustion is so perfect that there is no perceptible ash left.

#### Precautions to be Observed.

In preparing colored fires, precautions should be taken to avoid the danger of accidents from premature explosion of mixtures.

Glass stoppered bottles should not be used for mixtures containing potassium chlorate and sulphur, since accidents have arisen from the ingredients getting ground between the stopper and the neck of the bottle.

Never use a pestle and mortar, as explosions would result from forcible trituration of mixtures containing potassium chlorate and sulphur.

The formulas printed below represent the kind of colored fires usually required to be made by pharmacists, and no attempt has been made to enumerate any of the fancy combinations which require machinery or extra manipulation for their exhibition and are not important to the pharmacist.

#### Brilliant White and Colored Fires.

##### BENGAL FIRES.

The first four formulas afford inexpensive compositions which give good results. The color is a bluish white:

##### WHITE.

	I.	Ounces.
Potass. nitrate.....	8	
Sulphur, washed.....	4	
Antimony sulphide.....	2	

	II.	Ounces.
Potass. nitrate.....	12	
Sulphur, washed.....	4	
Antimony sulphide.....	1	

	III.	Ounces.
Potass. nitrate.....	8	
Sulphur, washed.....	2	
Realgar.....	1	

	IV.	Ounces.
Potass. nitrate.....	4	
Sulphur, washed.....	2	
Orpiment.....	1	

	V.	Ounces.
Potass. nitrate.....	8	
Charcoal.....	1/2	
Shellac (coarse).....	2	

	VI.	Ounces.
Potass. chlorate.....	6	
Potass. nitrate.....	2	
Stearic acid.....	1/2	
Milk sugar.....	2	
Barium carbonate.....	1/2	

	VII.	Ounces.
Potass. nitrate.....	6	
Antimony sulphide.....	2	
Shellac.....	2	
Sulphur, washed.....	1	

Some ingenuity is required in the manufacture of the different shades of red, crimson and green.

**BRILLIANT RED.**

I.	
Strontium nitrate.....	Ounces. 10
Potassium chlorate.....	3
Sulphur, washed.....	2
Shellac, in fine powder.....	1

II.	
Strontium nitrate.....	Ounces. 8
Potass. chlorate.....	2
Shellac, coarse.....	2

III.	
Strontium nitrate.....	Ounces. 10
Potass. chlorate.....	1
Charcoal.....	1
Sulphur, washed.....	1

**RICH CRIMSON.**

Strontium nitrate.....	Ounces. 16
Potass. chlorate.....	6
Sulphur, washed.....	4
Copper sulphide.....	3
Mercurous chloride.....	2
Shellac, in fine powder.....	1

**CRIMSON.**

Potass. chlorate.....	Ounces. 1
Strontium nitrate.....	6 1/2
Charcoal.....	2
Shellac, coarse.....	2

**GREEN.**

I.	
Barium nitrate.....	Ounces. 6
Potass. chlorate.....	1
Shellac, coarse.....	2

II.	
Barium nitrate.....	Ounces. 4
Milk sugar.....	4
Potass. chlorate.....	8

III.	
Barium nitrate.....	Ounces. 8
Potass. chlorate.....	4
Sulphur, washed.....	1
Antimony sulphide.....	1/4
Charcoal.....	1/4

**PALE GREEN.**

Barium nitrate.....	3 x 1/2
Potass. chlorate.....	3 1/2
Sulphur, precipitated.....	1 ss
Shellac, in fine powder.....	1 ss
Realgar.....	1 ss
Charcoal.....	3 1/2

**BRILLIANT GREEN.**

Barium nitrate.....	3 x 1/2
Potass. chlorate.....	3 1/2
Sulphur, precipitated.....	1 1/2
Shellac, in fine powder.....	1 1/2
Mercurous chloride.....	1 1/2
Charcoal.....	3 ss

**RICH GREEN.**

Barium nitrate.....	3 x 1/2
Potass. chlorate.....	3 1/2
Sulphur, precipitated.....	3 1/2
Barium chlorate.....	1 1/2
Mercurous chloride.....	1 1/2
Shellac, in fine powder.....	3 1/2
Charcoal.....	3 ss

**LILAC.**

Potass. chlorate.....	Ounces. 6
Shellac, coarse.....	8
Chalk.....	8
Black oxide of copper.....	1

**VIOLET.**

Potass. nitrate.....	Ounces. 3
Potass. chlorate.....	8
Shellac.....	2
Chalk.....	2
Charcoal.....	1/4

**YELLOW.**

Sodium nitrate.....	Ounces. 8
Shellac, coarse.....	1
Charcoal.....	1

**BLUE.**

Potass. nitrate.....	Ounces. 8
Antimony sulphide.....	4
Zinc, metallic.....	2

Potass. chlorate.....	8
Potass. nitrate.....	4
Sulphur, washed.....	1
Copper oxide.....	1
Potass. chlorate.....	6
Alum, exsiccated.....	3
Shellac, coarse.....	2
Sulphur, washed.....	1

**BRILLIANT STARS.**

Potass. nitrate.....	Parts. 52
Sulphur.....	13
Black antimony.....	13

Make this into a stiff paste with a solution:

Isinglass.....	Parts. 2
Vinegar.....	8
Alcohol.....	13

Form into small pieces, and while still moist roll in meal gunpowder.

**GOLDEN RAIN.**

1. Potass. nitrate.....	Parts. 16
Gunpowder.....	16
Sulphur.....	10
Charcoal.....	4
Lampblack.....	2

Mix and fill paper tubes.

2. Potass. nitrate.....	Parts. 16
Sulphur.....	8
Gunpowder.....	8

Charcoal.....	2
Lampblack.....	2

**LIQUID COLORED FIRES.**

These may be made by dissolving certain substances to saturation in alcohol or other liquids which dissolve them, and burn with rapidity. They are best ignited in a shallow iron pan, which for safety should be set in a shallow pan of water.

The substances used should be finely powdered and triturated with the alcohol in a mortar.

Blue may be made by dissolving zinc acetate in alcohol, (green by dissolving boric acid in alcohol) red by dissolving strontium nitrate in alcohol, or by making a strong tincture of lycopodium; violet by dissolving potassium carbonate in alcohol, yellow by dissolving sodium nitrate in alcohol, white by dissolving camphor in alcohol.

Another method of exhibiting colored fires, and perhaps the best of all, is to mix the finely powdered substances which produce the colors as above with a moderately thick solution of shellac in alcohol. They are thus suspended, and when burned give forth their characteristic color.

## The Perfume Industry in Australia.

What Australian Farmers, Manufacturing Chemists and Horticulturists are Doing in the Cultivation of Perfume Plants—A Lucrative Industry—Full Outlay and Quick Returns—Of Especial Interests to American Druggists.

By W. LODIAN,

Foreign Correspondent of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

The object of this paper is to place within the reach of all who are likely to be interested in the industry of perfume plants, to enable them to practically grasp the methods, a simple and non-technical description of how the work is carried on at the Australian Government Scent Farm in the cultivation of the proper plants, and the extraction of the oils by the processes of distillation, and the hot and cold processes of extraction by fat.

When, three years ago, the writer was visiting the great flower farms at Grasse, Southern France, he could not help marveling why the extensive industry of raising flowers for perfumery making was not carried on in other climes. There is money in it, certainly.

**SOME RESULTS PER ACRE.**

The bitter orange blossom will yield 80 ounces of essential oil per acre, which at 15 shillings to £1 per ounce means £60 to £80 per acre. The acre of jasmin will bring in £20 to £30, roses from £70 to £90 per acre (the attar is exceedingly limited, or probably the sum per acre would be higher). An ounce is worth from £3 to £8. Even the prolific oil producing true lavender brings 60 shillings per pound. Peppermint yields up to 80 pounds of oil per acre, which at 80 shillings per pound means a return of £45 per acre. And so on with the other essential oils, all of which are most valuable. Compare these figures, ye struggling farmers, with your present low returns for growing corn or market produce! Study the perfume market, form rings for keeping up prices, and place your trust in—roses, the attar of which is never likely to be over produced.

**A FEW FIGURES ABOUT OTHER COUNTRIES.**

Last year in France the Grasse district alone produced 2,000 tons of orange blossoms, 1,500 tons of roses, 220 tons violets (cheap labor and abundance defy chemical competition), 200 tons jasmin, 88 tons tuberose, 38 tons jonquil, 88 tons acacia, 22 tons mignonette. One factory there by itself uses 50 tons acacia, buying up the flowers from neighboring regions; 70 tons roses, 16 tons jasmin and 10 tons tuberose. There are 50 distillers in Grasse, a town of 11,000 inhabitants, some employing 500 hands in season.

**WHAT THE PERFUME STILL IS LIKE.**

This is a very simple arrangement. Any intelligent person, whether a mechanic or not, can construct one with the partial aid of a blacksmith. A roughly made plant consists as follows: A metallic tank of about 100 gallons capacity, the interior fixed with a holed false bottom about 9 inches from the base, and set in brickwork (although this is not absolutely necessary), with a fire retort under. A funnel about 1 foot in diameter at its greatest extent, with a rim to enter and a flange to support it, is fitted like a saucepan lid over a similar hole in the head of the tank. A pipe 3 inches in diameter, a continuation of the funnel, continues like a spiral worm around the interior wood work of a barrel filled with cold water, the end emanating near the base like a faucet. This completes the apparatus.

A 5-gallon still can be constructed for about £5 or less. Stills can be extemporized, as they are by the French peasants, who have much liberty allowed them in this respect, and which has



helped to build up one of the greatest industries of France.

The small still is the first one used at the scent farm. Its capacity is about 10 gallons, and costs £5, combining a *bain marie*, or adjustment for melting fat, when required.

#### HOW THE DISTILLING IS DONE.

The space below the false bottom of the still is occupied by water, and a few pounds of salt or alum is dissolved therein to increase its boiling point. The tank is now filled with the desired flowers, and the funnel-shaped steam lid is held in place by being screwed down, and the device packed round with clay just damp. A quick fire is ignited under the still, causing vapor, which percolating through the flowers lying in the false bottom, releases the attar; and steam and oil go jointly up the funnel and wind their way through the condensing corkscrew-shaped pipe. A stream of cold water running into the tub (or ice could be used) helps condense the steam and oil, which flow into a glass jug or vase. The oil is seen floating on the top, and is skimmed off by a spatula, or black ivory paper knife, or sucked off the water by a pipette (glass pipe), a crystal tube having a bulb about 8 inches from one extremity. The distiller places one end in his mouth, and lightly touching the little floating filaments of essential oil with the other, draws them into the bulb.

If the identical distilled water is employed several times over, it increases the output of oil. The temperature of the steam must not be too great, or the essential oil is liable to be injured. Time: About three hours. The false bottom containing the stewed leaves is hoisted and the mashed mass is used as a fertilizer.

This process applies to the rose only. Rightly speaking, all stills should be made of very stout tin, and should be recoated with tin, or enameled, every year. They are usually made of copper, but of late years the perfume distillers use them coated with tin.

#### PROCESSES OF EXTRACTION.

Besides distilling there are four methods for extracting scents from flowers. They are: Expression, maceration, absorption, and the methyl-chloride process. Expression is only adopted where the substance treated is very liberal in its native or essential oil, such as the peel of the orange or citron. By maceration is meant the placing of the flowers in fat made liquid (just warm), allowed to remain therein about three days (no need to keep it warm), and then warmed sufficiently to allow the fat to drain from the exhausted flowers, and after squeezing out what fat remains with these, they are thrown onto the fertilizing heap. Fresh flowers are added to the fat, the absorbing qualities of which are well known, and after eight or nine such changes the fat is found sufficiently perfumed. It is then treated with alcohol, and yields its perfume to the treatment, which becomes the perfume article of commerce. The fat, if properly cleaned, can be used over and over again. The heat of maceration, however, is rather injurious to the delicacy of the perfume.

The absorption process, usually known by the French name of *enfleurage*, consists in the flowers being laid on frames of cold fat, which is subsequently treated as in maceration. Cotton rags soaked in olive oil are also used, then the oil is

squeezed out and treated. The methyl-chloride process is a chemical treatment, to be best studied in text-books. All considered, the distillation process is best; but study well the law before building a still.

(To be continued.)

Written for the  
*American Druggist and Pharmaceutical Record.*

### MY EXPERIENCE AS A HOSPITAL STEWARD IN THE UNITED STATES ARMY.

BY WILLIAM LANG,  
Hospital Steward, U. S. A.

In response to the request of the Editor for my experience in the service I would state that prior to my entrance into the army I had no experience in pharmacy. I enlisted July, 1892, and was assigned to the Eighteenth Infantry, stationed at that time in Montana. In this regiment I served for five years, having held the grades of corporal and sergeant during the last three years of service. After my discharge, in the Indian Territory, in 1897, I returned East and again rejoined the army at Willets Point, N. Y., where, shortly after I transferred into the (then) newly organized Hospital Corps. I commenced the study of pharmacy, etc., necessary to pass the examination for acting steward shortly after joining the corps, and after more than three years' hard study, with little or no assistance to direct my studies, finally passed my examination for acting steward in the spring of 1899. A year after I took the examination for a stewardship and received my appointment a few months later. Ten months after appointment as a steward I was again examined to allow of my re-enlistment in this grade. Should I desire to re-enlist a year hence, and my application be entertained, it will be necessary to stand another examination. This will make a total of four examinations in seven years.

#### SEVERE EXAMINATIONS.

As each succeeding examination is progressive in the scale of questions, it will be seen that the army steward who desires to retain his position must constantly keep up with the progress of the day. His studies should never end. When he passes each succeeding examination his knowledge is supposed to have expanded in the ratio of the time passed. His status and pay, however, remain the same, unless the pittance of an additional dollar per month upon re-enlistment be called an increase.

The ambitious young man entering the service to day will find that the same amount of mental energy required for the position of steward, applied in a different channel, will gain him a commission as a second lieutenant in about the same length of time required to become a steward.

In the five years that I have held the position I have always been at isolated stations, and have consequently found no opportunity to take a course in pharmacy or medicine.

Fort Apache, my present station, is a six-company post, with an aggregate population of about 500 souls, exclusive of Indians, who are sometimes treated at the hospital also. During the past three months I have been without assistance, the acting steward being on leave. With

a large number of minor emergency cases of almost daily occurrence, dispensary work, supervision of ward and kitchen, the care of Government property, keeping of records, correspondence and routine monthly reports, and a thousand and one odds and ends constantly demanding one's attention, no time is left for recreation or leisure moments to pass away. Work and worry over property accounts, etc., I have had "year in and year out." During 14 years' service, 20 days' leave of absence from duty is all the leave I have ever enjoyed.

#### THE AMERICAN PHARMACEUTICAL ASSOCIATION BILL.

As to the bill introduced in Congress, through the kind interests of the American Pharmaceutical Association, for the reorganization of the Hospital Corps, I may be allowed to be somewhat skeptical as to its final passage. I believe there is a general feeling throughout the service among officers that army stewards are receiving too much compensation already, and that they should not receive more pay than the non-commissioned staff. The amount of study and peculiar qualifications necessary to pass and hold the position are evidently not recognized.

The veterinarian in the army receives \$75 to \$100 per month. The bill giving him the rank and pay of second lieutenant is, I believe, favorably reported to the House by the Military Committee. The steward, who is supposed to know enough to save human life in emergency, and is, in the absence of the surgeon, which frequently occurs, depended on, and in charge of the medical welfare of the garrison, receives \$45; and this is considered by many too much for his services. Justice alone ought to bring about the passage of the bill for his promotion.

FORT APACHE, ARIZONA.

Written for the  
*American Druggist and Pharmaceutical Record.*

### PAY AND RANK OF THE HOSPITAL STEWARD IN THE UNITED STATES ARMY.

BY PHILIP F. ERCK,  
Hospital Steward, U. S. A.

After careful perusal of Steward Von Clossman's recital of the position, rank and pay of the hospital steward it seems to me that very little, if anything, remains to be said, but as criticism furnishes an excellent means to bring out the different ideas of different persons upon a given subject, I will try to give my view of the matter in hand.

#### QUALIFICATIONS OF THE HOSPITAL STEWARD.

As the law now stands, every hospital steward previous to his re-enlistment must pass a written and oral examination in professional subjects bearing upon his duties. The questions for the written examination come direct from our chief, the Surgeon-General of the army; the oral examination consists of such interrogatories as the board sees fit to prepare. At the conclusion of the examination all the papers are sent to Washington for action by the Surgeon-General. The subjects embraced in this examination are materia medica, pharmacy, toxicology, chemistry, minor surgery and hygiene. Of late I have heard it inti-

mated that an elementary knowledge of bacteriology will also be required.

In addition to this professional knowledge the hospital steward must be a good clerk, a careful and accurate accountant, and finally, he is the keeper of a vast amount of valuable property, which, while not as great in bulk as that of other departments in the army, is fully as valuable, when one considers the great quantity of bedding and instruments, as well as of drugs, etc., which are under his care. All these qualifications and responsibilities are exacted from one person, the hospital steward, who is but a non-commissioned officer and receives the munificent salary of \$45 a month.

#### THE TITLE A RELIC OF ANTIQUITY.

The title "Hospital Steward" is a relic of antiquity. It implies nothing when applied to him who has passed the examination, has the responsibilities and performs the duties as described. A hospital steward may be mistaken for a "butler" or "dish washer" in a hospital, or, as he is frequently spoken of as the "steward"—by those not initiated

into the peculiarities of army life—he may be confounded with the gentleman of color who attends to the wants of officers and passengers on a Mississippi River boat. Again, we already have one "steward" in the army, the exchange steward (whose title, by the way, seems correct), who is in charge of the exchange. While he is a dispenser, he handles beer and not drugs.

The hospital steward should cease to be known in the army and instead there should be pharmacists or apothecaries, and the acting stewards should be assistant pharmacists or apothecaries. The pharmacists should be "warrant officers." Once examined, once appointed, there should be no more ado about it. This would give them a rank more in accord with the position, also take them out of the enlisted ranks of the army.

Their pay should be commensurate with the duties they are required to perform and should not be less than \$75 a month, with quarters and allowances as now allowed by law, excepting as regards pay.

that the pharmacist can procure the goods and manufacture many of the fluid extracts and other preparations, and save money by so doing.

### The Growing Importance of Pharmaceutical Assaying for all Pharmacists.

By A. R. L. DOHME, PH.D.,  
Baltimore, Md.

It has not been long since the subject of the assay of galenic drugs and their preparations was a pharmaceutical luxury; when pharmacists thought it something suitable for the professor and the student, but not for the pharmacist.

This time is fast passing away, and in ten years or less from now I think I will not be drawing on my imagination when I say that all, or certainly most druggists will be compelled for their own protection and welfare to not only understand assaying, but to perform it. It has not been absolutely necessary up to now, to be sure, to care to know, or to be able to know, the exact strength of the preparations on the shelves of the pharmacist, and for several reasons.

Firstly, because reliable methods were not at hand; and secondly, because the Pharmacopoeia so arranged its preparations that absolute danger was practically precluded from their use in prescriptions if the proper dose was attached thereto. This precaution assured us of not exceeding the maximum dose of the active principle of the drug in question. But has any one here even a vague notion of the number of times the dose was too weak, frequently practically inert, because the strength of the preparation was either at the minimum or below it, as far as the amount of active principle was concerned. How many thousands of prescriptions have in the past and are to-day being filled that can produce no therapeutic effect, because they are made from drugs poor in active principle, be this alkaloid, resin, glucoside, acid or other organic ingredients.

The pharmacist replies that he feels himself protected because he uses the manufacturer's preparations, and the latter vouches for the accuracy and value of the same. Fortunately for him, he is seldom if ever disappointed; but would he not be better off if he could and did convince himself of the actual value of the preparation? Most assuredly. Some pharmacists might reply to this that their vocation was becoming too much of a business, and too little of a scientific calling, to justify the trouble and expense, and that their competitor across the way was making a far greater success than they without it, principally because he could dress his window better and had a prettier soda fountain. But, fellow-members of this association, this is a mistake, a grave mistake.

#### THE RIGHT WILL PREVAIL.

The public has, I grant, not been educated up to the knowledge of what pure drugs are, and judges more by appearance than by results, but some of these days, perhaps not until the twentieth century, the light of public scrutiny will be directed upon the pharmacists' shelves, and then will the righteous prevail. In these days political rings are overthrown and frauds exposed and their authors brought to justice, because public sentiment is being educated by the press, that great and invaluable friend and tutor of

## Papers Read at the Meeting of the Maryland Pharmaceutical Association.

### Can the Pharmacist Buy Crude Drugs so as to Compete with the Manufacturer?

By COLUMBUS V. EMICH,  
Baltimore, Md.

*"Is it possible to procure first class drugs in quantities of 1 to 5 pounds at such prices as will enable the pharmacist to manufacture fluid extracts in competition with the large manufacturer?"*

This is a pertinent question and one that should be easily solved. It cannot be answered simply by statistics as to prices and quantities, though these questions are involved in the answer.

As a general statement it may be said that the difference in rate paid by the large dealer and the price paid by the pharmacist will not exceed 10 to 15 per cent. The great advantage the large dealer with abundant capital at his command has, is in the power to choose the time for his purchase, or in other words take advantage of opportunities.

This advantage will frequently occur to the pharmacist who will take the necessary steps to keep himself posted on prices and accumulations of stock.

An experience of some length of time in the business warrants me in answering the question affirmatively. I recall many grades of goods that were in free use when I entered the business that have entirely disappeared on account of the demand for better goods. And I have found that trade is just as sensitive to the law of demand and supply as is capital to political conditions.

#### THE LAWS OF SUPPLY AND DEMAND.

When the demand is for prime articles and there is willingness to pay for them you have them freely offered; when, on

the contrary, prices rule the market, instead of quality, depreciation in quality takes place. And this rule is as inexorable as the laws of the Medes and Persians.

Under the stimulus of a demand for assayed goods we have had prepared for this very demand of the pharmacist a class of assayed goods that leave but little to ask for. Among the wholesale trade there is an increased preparation for furnishing first-class goods, and a careful examination of stock offered, with a willingness to pay for the quality, will secure the goods.

#### COST VS. QUALITY.

As a matter of course, if the pharmacist selects each individual piece of rhubarb and from that prepares his fluid extracts of rhubarb, he cannot compete in price with the manufacturing firm that buys a case of worm eaten rhubarb and makes it up into fluid extract, excreta, worms and all; and this is precisely the statement made to me by a salesman of a large establishment as to why his fluid extract of rhubarb could be sold for so much less than could that which I prepared myself. I believe the fluid extract of rhubarb, as prepared from the selected root, is what should be prepared and dispensed, notwithstanding the claim made that because the worms only eat the starch matter the worm eaten rhubarb is stronger than the select.

I regret very much that time was not allowed me by the stress of other matters to prepare a tabulated statement of cost of fluid extracts prepared by myself, and the prices asked by the manufacturer. I have frequently made a saving of 20 to 50 per cent. on the prices asked, and this frequently from crude drugs of the identical lots purchased by the manufacturer.

Consequently I unhesitatingly state

the people, and the people being brought to see in detail into the actual state of affairs behind the counter. Some of these days the press will turn its searchlights so as to shine through the pharmacists' doors and windows, and then will the assay pharmacist be in the ascendant.

If the great public can be brought to see that of all things their medicines should be pure and reliable, and that they are daily, yea hourly, risking their lives, or rather placing them in the hands of the man who puts up their prescriptions, they will, no doubt, be convinced that it is about time that they make such laws that their lives be henceforth safe, or if not, that the offender may be brought to justice and made an example of.

#### PURE DRUG LAWS A BLESSING TO PHARMACISTS.

Some of these days such laws will not be limited to the State of Ohio, but will be general through this great and glorious land. If our beloved, though slightly phlegmatic State of Maryland will soon wake up to the necessity of adopting a pharmacy law and thus be up to date, or nearly so, for Maryland is practically the only State that has no such law, there might be an excellent chance for her to come to the assistance of her Buckeye sister State and advance from the rear to the very front column of the advanced guard in modern pharmaceutical progress. Gentlemen, it is a mistake to assume that a pure food and drug law is a hardship and makes unjust demands upon the pharmacist. It is not, provided the State Chemist and his assistants are capable men, and provided the commission to enforce the law is honest and just. If both these provisos are granted, then instead of an infliction, the law will be a benefit to the pharmacist, because it will remove him from unscrupulous competition, elevate his calling and be a recommendation and endorsement of his business.

#### EVERY PHARMACIST A CHEMIST.

Should this come about, and I think it will, then it will be necessary for the pharmacist to be able to assay and examine all his drugs, so as to protect himself and his business against decline and eventual disaster. If he then assays and examines his drugs, he will know that his customers will have no cause to complain, because they will always know what they are getting, and that they are getting the best.

#### INCREASE IN STANDARDIZATION.

The next revision of the Pharmacopoeia will undoubtedly include many more than the present among the drugs that require to be assayed and to be of a certain standard.

This number will continually increase as time wears on, especially if pharmaceutical colleges will so advance their courses and improve their facilities that research work in drugs is not the exception but the rule with them, and if they also include in their curriculum, as they should also in the medical colleges, the great science of pharmacology, which teaches us how to study the action of drugs upon the human body and its functions.

#### WHAT THE PHARMACIST SHOULD KNOW.

It is not enough for the pharmacist and physician to know if this or that or these or those substances are the constituents of the drug; he should know which is the active constituent, and, if there are sev-

eral, the therapeutic value and effect of each. We thus see a large future ahead for pharmacy, for we ought to and will some day know the cause of the action of all of the many drugs in the Pharmacopoeia.

Gentlemen, science in general is advancing, and medicine in particular is advancing very rapidly. Should not pharmacy keep pace with the advance of her best friend, medicine? If pharmacy is to advance, and we certainly are a unit in desiring this, then it seems to me that it is along the lines I have pointed out that it will advance. If it does, then the advance will be of as great benefit to medicine as to pharmacy, and this we certainly all wish. Be that as it may, I will, in conclusion, express the hope that I have proved my theorem and established my thesis that pharmaceutical assaying will become more and more important as time wears on.

#### On the Chemical Composition of Oil of Sassafras Bark, etc.

BY F. B. POWER AND C. KLEBER.

(Continued from page 274.)

From the aqueous, alkaline solution which remained after the distillation with steam the acids were liberated by means of dilute sulphuric acid, and distilled by steam. Some oily drops were obtained in the distillate, which, judging from their odor, as also that of their ethyl ester, consisted of iso-valerianic acid. The remaining distillate, after being neutralized and concentrated, was fractionally precipitated by silver nitrate. After separating the first precipitate, there was thus obtained the silver salt of acetic acid.

0.2387 gm. of the silver salt afforded 0.1532 gm. of silver, corresponding to 64.2 per cent.

Silver acetate contains 64.7 per cent. of silver.

The saponified oil which had been distilled by steam, as previously described, was subjected to fractional distillation under a pressure of about 25 mm. It was thus resolved into essentially three fractions, having the boiling points respectively of 60 to 80 degrees, 100 to 120 degrees, and 135 to 140 degrees C. In the first fraction both pinene and a considerable amount of phellandrene could easily be detected by means of their respective benzylnitrolamine and nitrite compounds. Furthermore, the odor and taste of this fraction also indicated the presence of the aliphatic terpene, myrcene (with three double bonds), which had previously been isolated by us from bay oil.\* Unfortunately, no reactions are as yet known for the certain identification of this body, although its presence in this oil is made very probable for the following reasons:

#### MYRCENE IN OIL SASSAFRAS LEAVES.

1. By the slow distillation of this terpene fraction under ordinary pressure only a portion passed over below 200 degrees C., the remainder forming a thick oil which only distilled at a temperature above 300 degrees C., with partial decomposition.

2. When gently heated for half an hour with glacial acetic acid and a trace of 50 per cent. sulphuric acid, the fraction acquired the unmistakable odor of linaloyl acetate, a behavior which is characteristic for myrcene.

8 Two fractions which were collected in the neighborhood of 70 degrees C., under a pressure of 25 mm. possessed the following physical constants:

Fraction I. Spec. grav. at 18.5 degrees C. 0.8429,  $n_D^{20}$  1.4734,  $M_{90}$  45.29; fraction II. Spec. grav. 0.8395,  $n_D^{20}$  1.4760,  $M_{90}$  45.69. The specific gravity is thus lower than that of any of the known terpenes, and that of myrcene we have previously found to be 0.8006 at 15 degrees C. On the other hand, the molecular refraction is higher than may be calculated for even a terpene with two double bonds ( $M_{90}$  = 45.24), although the presence in this case of pinene, which only contains one double bond, must naturally diminish the refraction.

The fraction 100 to 120 degrees C. distilled, for the most part, under ordinary pressure at about 200 degrees C. By its odor, as also that of its acetic ester, it was unmistakably recognizable as linalool. Furthermore, by gentle oxidation with a chromic acid mixture we readily succeeded in converting it into citral, which in turn was further identified by its conversion into the characteristic citryl- $\beta$ -naphtho-cinchonic acid.

The third fraction (135 to 140 degrees C.) distilled under ordinary pressure at 230 degrees C., and its odor indicated it to consist of geraniol. We succeeded also in obtaining therefrom, after prolonged treatment with anhydrous calcium chloride, the compound which is characteristic of this alcohol.

For the qualitative estimation of the linalool and geraniol, which are evidently contained in the oil, both in the form of the acetic ester and in the free state, the following experiments were conducted: 19.19 gm. of the oil required for saponification 2.3 ccm. of alcoholic normal solution of sodium hydrate, which would correspond to 2.4 per cent. of linaloyl and geranyl-acetates. On the other hand, after boiling the oil for one hour with an equal volume of acetic anhydride and a little anhydrous sodium acetate, 14.36 gm. of the acetylated oil required for saponification 10.7 ccm. of normal alkali, corresponding to 12.1 per cent. of the alcohols linalool and geraniol,  $C_{10}H_{18}O$ . It should, however, be noted in this connection that the actual percentage is probably considerably higher, for it has been shown by investigations conducted in the laboratory of Messrs. Schimmel & Co., Leipzig (see *Bericht*, April, 1898, p. 36), that the acetylation of linalool is not by any means quantitatively effected.

The small residue which remained above 140 degrees C., under a pressure of 25 mm., afforded the color reaction of cadinene, but, as in the case of the oil from sassafras bark, a solid hydrochloride could not be obtained therefrom.

The oil of sassafras leaves, therefore, contains the following bodies:

Pinene.....	$C_{10}H_{16}$
Myrcene (?).....	$C_{10}H_{16}$
Phellandrene.....	$C_{10}H_{16}$
Linalool.....	$C_{10}H_{18}O$
Geraniol.....	$C_{10}H_{18}O$
The Acetic and Valerianic {	$C_{10}H_{17}-C_2H_3O_2$ and
Esters of these alcohols, {	$C_{10}H_{17}-C_8H_{15}O_2$
Cadinene (?).....	$C_{15}H_{24}$
A paraffin.....	$C_nH_{2n+2}$

In the two oils here described we have a striking and interesting example of the fact, which has repeatedly been observed in other instances, that different parts of the same plant may produce essential oils which are fundamentally different in their chemical composition.

\* Pharm. Rundschau, N. Y., March, 1895.

\* Calculated according to the  $n_D^{20}$  formula.

# A Synopsis of the Pharmacy Laws of the United States.\*

## A Summary of the Principal Provisions of the Various Laws Pertaining to the Practice of Pharmacy.

BY PROF. J. H. BEAL,  
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THE object of the following papers is to present in a form convenient for reference, and free from legal verbiage, the principal features of the several pharmacy laws of the American Union, the provisions chiefly referred to being as follows: The dates of enactment and amendment of the laws and the extent to which they apply over the State. The constitution and selection of the examining boards, their revenues, powers, and compensation; the grades of licenses issued, the legal qualifications of licentiates, and the credit allowed for diplomas in medicine and pharmacy; and the fees for registration and renewal, provisions affecting adulterations, the labeling of poisons, etc.

*Unless otherwise expressly stated in the abstracts given it is to be understood:*

1. That each law applies territorially to the entire State which enacted it.
2. That the style of the examining board is simply Board of Pharmacy or State Board of Pharmacy.
3. That the number of years for which the members hold office is equal to the number of members on the board, i.e., if the board has five members the term of office is five years.
4. That the statutory titles of the licentiates are Registered Pharmacist and Registered Assistant, or Assistant Pharmacist.
5. That the certificates of other boards and diplomas of colleges of pharmacy and medicine are not recognized by the law.
6. That there is no statutory requirement of age and experience.
7. That no renewal of registration is required.
8. That the Pharmacy Act does not prohibit adulterations nor require the labeling of poisons.
9. In general that when the abstract does not mention any particular subject, it is because the pharmacy law is silent upon the point in question.
10. That certain provisions uniformly present in all the laws are omitted, such, for example, as the provision for the registration without examination of those engaged in pharmacy at the time of enactment of the law. Such provisions are of temporary and local interest only and would occupy space without imparting information.

In order to avoid needless repetition, the following general forms of poison and label laws are given, and are referred to by number under the States which have the same or similar provisions:

### General Form of Poison and Label Law.

#### FORM NO. 1.—Schedule A.

Arsenic, and its preparations, corrosive sublimate, white precipitate, red precipitate, red mercuric iodide, potassium cyanide, hydrocyanic acid, strychnine, and all other poisonous alkaloids and their salts, essential oil of bitter almonds opium and its preparations, excepting paregoric and other preparations of opium containing less than  $\frac{1}{2}$  grains to the ounce.

#### Schedule B.

Aconite, belladonna, colchicum, conium, nuxvomica, henbane, safin, ergot, cotton root, cantharides, creosote, digitalis, and their pharmaceutical preparations, croton oil, chloroform, chloral hydrate, zinc sulphate, mineral acids, carbolic acid and oxalic acid.

The articles contained in both schedules must be labeled, both on the container and on the outside wrapper, with the name of the article, the word "Poison," and the name and place of

business of the seller. Nor may any such article be delivered until it has been ascertained that the purchaser is aware of its poisonous character and desires it for a legitimate use. In addition to the preceding, when any article in Schedule A is sold an entry must be made in a book kept for the purpose, stating the date of the sale, the name and address of the purchaser, the name of the article, the purpose for which it is to be used, and the name of the dispenser. This record must be preserved for at least five years. The requirements as to labeling and recording do not apply to poisons dispensed on physicians' prescriptions, when not in unusual quantities or doses.

#### FORM NO. 2.

The same as No. 1, except that all named poisons are embraced in one schedule and that the recording of the circumstances of the sale is not necessary.

Variations from the above forms are noted under the laws in which they occur.

It should also be remembered that the synopsis purports only to give the provisions of the "Pharmacy Act" itself. The criminal code of the State may contain other laws affecting the practice of pharmacy, or the State Board may have rules fixing fees less than allowed by the statute, or requiring age and experience when the law does not. In only a few laws are such facts referred to.

Some of the laws are so loosely drafted as to leave the meaning of certain provisions in doubt. In such cases the writer has adopted that interpretation which seemed to him most probable.

In some instances the date of enactment could not be obtained, and in the case of a few others the dates given are open to doubt. The writer will be thankful for the correction of any errors which he may have made. The writer desires to express his obligations to the Secretaries of various boards, for courtesies shown, and to Caswell A. Mayo, Editor of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, for assistance in procuring copies of the laws and for revising the abstract of the laws of New York.

### Nebraska.

Enacted 1887. Amended 1889.

The "Nebraska State Board of Pharmacy" consists of the Attorney-General, Secretary of State, State Auditor, State Treasurer and the Commissioner of Public Lands and Buildings. This Board appoints five "Examiners or Secretaries," selected from nominees presented by the State Pharmaceutical Association. (The Board of Pharmacy has power to "discharge any of said secretaries at any time.") The examiners receive \$5 per day and expenses. Four meetings are held annually. The excess of receipts over expenditures is annually covered into the State Treasury.

There is one grade of licentiate, who must be 18 years of age, have three years' practical experience in pharmacy, and must furnish satisfactory evidence that he is of temperate habits. Section 5 of the act provides that a person registered as assistant for two years may be registered as pharmacist without examination, but no way is provided for the registration of assistants. The Board may grant temporary certificates to licentiates of other Boards and graduates in pharmacy, good only until the next succeeding examination.

The fee for examination and registration and for a temporary certificate is \$5. An annual renewal is required, for which the fee is \$2. Failure to renew within ten days after notice given by the secretary, or failure to notify the secretary of change of address, revokes registration and renders a new examination necessary in order to be restored to the rolls.

General dealers may handle proprietary medicines, but not the so-called "grocers' drugs."

Willful adulteration or fraudulent alteration or substitution of drugs so as to deteriorate their quality is declared a misdemeanor and the Board of Pharmacy is empowered to procure the analysis of the suspected articles and cause the prosecution of the offender.

Registered pharmacists are exempt from jury duty.

The pharmacy act does not contain any provision for the labeling or sale of poisons.

### Nevada.

(Has no pharmacy law.)

### New Hampshire.

Enacted 1875. Amended 1889.

The board is styled the Commission of Pharmacy and Practical Chemistry, and consists of three members appointed by the Governor with the advice of the Council. The statement as to compensation is not entirely definite. Apparently the board is authorized to make use of all the income from fees, and to receive from the State treasury in addition \$5 per diem and expenses, for not exceeding 15 days annually. Four meetings are to be held yearly.

The law provides for two grades of licentiates. No age or experience is specified for pharmacist, but an assistant

\* Abstracts of the laws of the following States have been published in this series: Alabama, Arkansas, California, Colorado and Connecticut in the issue for March 25, p. 180; Delaware, District of Columbia, Florida, Georgia, Idaho and Illinois in the issue for April 10, p. 213; Iowa, Kansas, Kentucky, Louisiana, Maine and Maryland in the issue for April 25, page 246; Massachusetts and Michigan in the issue for May 11, page 272. Minnesota, Mississippi, Missouri and Montana, in the issue for May 25, page 296.

must be 18 years of age and have two years' practical experience.

The fee for examination and registration is \$5 for pharmacist and \$3 for assistant. No renewal is required.

General dealers may sell proprietary medicines, but there is no exception in favor of the so-called "grocer's drugs."

The pharmacy act makes no provisions concerning adulterations or for the labeling or recording the sale of poisons.

Registered pharmacists may keep alcoholic liquors for use in the compounding of medicines.

### New Jersey.

Enacted 1877. Amended 1896, 1895.

The Board of Pharmacy consists of five members appointed by the Governor from nominees presented by the New Jersey Pharmaceutical Association. They receive \$5 per day and expenses. The excess of receipts above expenditures is paid annually to the treasurer of the New Jersey Pharmaceutical Association. Four meetings are held yearly in the city of Trenton.

Two grades of licentiates are provided for. A registered pharmacist must be 21 years of age and present evidence of four years' service in a drug store. "Qualified assistants" must be 18 years of age and have three years' experience.

The examination fee is \$10 for pharmacist and \$5 for assistant, with a triennial renewal fee of 50 cents.

The law permits the sale of "simple non-poisonous domestic remedies by retail dealers in rural districts," and of non-poisonous proprietary medicines.

The board may revoke the certificate of a pharmacist convicted for violation of the pharmacy act or of any crime involving moral turpitude, or who may be addicted to chronic and persistent inebriety.

The poison and label law corresponds substantially to Form No. 2, with the following exceptions: The list of named poisons includes tartaric acid, antimony, veratrum viride, gelsemium and the oils of savin and tansy. Colchicum, creosote, sulphate of zinc, mineral acids, carbolic acid and oxalic acid are not named specifically, but are brought within the schedule by the words "or any other substance commonly recognized as a deadly poison." Poison labels are to be of a red color.

"The penal provisions of this act shall not apply to the sale of such poisons as are used in the arts, agriculture or in manufacturing to persons known to be engaged in such pursuits."

The adulteration of or the sale of adulterated drugs, medicines or chemicals is declared a misdemeanor.

In section 7 it is stated that one-half and in section 9 that all fines shall be paid to the treasurer of the Board of Pharmacy.

### New Mexico.

Enacted 1889.

The Board of Pharmacy consists of five members selected and appointed by the Governor. The law contains no provision as to salary of the members, but implies that they are to retain for their services the fees received from registration. The board must hold quarterly sessions at such times and places as it may determine.

Registered pharmacist is the only grade of licentiate provided for.

Graduates of colleges of pharmacy which require three years' experience

before graduation may, at the option of the board, be registered without examination. In the interval between sessions any member of the board may grant, without charge, a temporary certificate of registration valid until the date of the next session.

The fee for registration by examination is \$5; for registration on diploma \$2. Certificates of registration must be renewed annually, but no fee is specified.

The pharmacist is responsible for the quality of goods dispensed, except in the case of proprietary medicines and of goods dispensed in the original packages of the manufacturer. Intentional and fraudulent adulteration is declared a misdemeanor.

General dealers may sell patent or proprietary medicines and "grocer's drugs," except when such are denominated poisons by the New Mexico poison law. Ranchmen and miners may supply medicines to their employees. In places where no drug store exists the board may grant "minor certificates to merchants and others to vend such medicines, compounds and chemicals as the general public may require."

Registration is forfeited by conviction for adulteration and by retirement from business for 12 months.

Penalties recovered under the law inure to the expense fund of the board.

A registered pharmacist is excused from jury duty on presenting an affidavit that there is no other registered pharmacist in the town, and that he is unable to procure such a person to take charge in his absence.

### LAWS OF NEW YORK STATE.

There are in this State four separate boards of pharmacy, operating under separate enactments of the Legislature. These are as follows: 1, For the city and county of New York; 2, Erie County (including Buffalo); 3, Kings County (including Brooklyn); 4, the New York State law, applying to all parts of the State not included within the preceding.

#### New York City.

Original enactment 1871. Present law enacted 1872. Re-enacted with slight changes in the "Consolidation act" 1882. Amended 1884, 1889.

The members of the Board of Pharmacy, five in number, of whom three shall be graduates in medicine, and two graduates of a college of pharmacy of the city of New York, are elected by the members of the New York College of Pharmacy. The term of office is three years. The secretary receives a salary fixed by the board; the remaining members serve without compensation. Four meetings must be held annually. Surplus of fees above expenses goes to the College of Pharmacy, and the penalties recovered for violations of the law to the library fund of the same institution.

There is but one grade of license issued, though the law distinguishes between graduates and licentiates in pharmacy, the latter term being applied to those who register by examination. Assistant pharmacists are also mentioned in the statute, but the requirements, except registration fee, are the same as for registered pharmacists.

Graduates of any college of pharmacy in the United States, or persons holding diplomas "from some authorized foreign

institution or examining board," who have had four years' experience are registered without examination. The language of section 2016 would also seem to indicate an intent to grant the same privilege to persons "having a diploma from some legally constituted medical college or society."

The fee for examination is \$5, with an additional fee for registration of \$2 for proprietors and \$1 for assistants.

The pharmacist is held responsible for the quality of goods dispensed, except when sold in the original packages of the manufacturer or in the case of proprietary articles. Willful adulteration is declared a misdemeanor and punished by fine and revocation of license.

The poison law corresponds to Form No. 1. (See also General Laws.)

#### Erie County (Buffalo).

Enacted 1884. Amended 1885.

The Board of Pharmacy consists of five members appointed by the county judge from a list of nominees presented by the Erie County Pharmaceutical Association, though any registered pharmacist or assistant pharmacist, whether a member of the association or not, has a right to vote at this election of nominees. The members receive \$3 per diem and expenses, and the secretary such additional compensation as the board may allow. Surplus of funds above expenditures is held by the secretary as a fund for administering the law. The board must meet at least quarterly.

Two grades of licentiate are provided for. Pharmacists are required to have four and assistants three years' experience. Graduates of legally constituted colleges of pharmacy in New York State, or of foreign institutions deemed by the board "to be of sufficient rank and requirements," and having four years' experience, are registered as pharmacists without examination. Licentiates by examination of other States or foreign countries may be registered at the discretion of the board. The fee for examination and license is \$7 for pharmacists and \$5 for assistants. The fee for registration on diploma is \$5.

The poison law corresponds to Form No. 1, with the following exceptions: Labels shall be printed in red ink. Schedule A omits red and white precipitate and red iodide of mercury. Schedule B includes omitted articles, also oil of tansy and lead acetate. General dealers may sell 80 enumerated articles including such articles as blue vitriol, bichromate of potash and Paris green (See also General Laws.)

#### Kings County (Brooklyn).

Enacted 1879. Amended 1886.

The board consists of five members, two of whom are pharmacists elected by the Kings County Pharmaceutical Society, two physicians elected by the Medical Society of Kings County, and a third pharmacist chosen by the four members elected by the societies, and who shall act as secretary of the board. The term of office is three years. The secretary receives a salary fixed by the board, but the remaining members serve without compensation. The board must meet at least quarterly; three members constitute a quorum. The surplus of fees above expenses and penalties recovered under the act accrue to the benefit of the Kings County Pharmaceutical Society.



Two grades of licenses are recognized. Pharmacists must have had four years' experience. The law also distinguishes between graduates and licentiates, the latter term applying to all who are registered by examination. Graduates of legally constituted colleges of pharmacy and medicine who have had four years' experience are registered as pharmacists without examination. The board may also at its discretion register the licentiates of other States, provided they have four years' experience.

The fee for examination is \$5, with a registration fee of \$2 for pharmacists and \$1 for assistants.

Pharmacists are held responsible for the quality of goods dispensed, except in the case of patent medicines and articles sold in the original packages of the manufacturer. Willful adulteration is declared a misdemeanor and punished by fine and revocation of registration.

The poison law corresponds to Form No. 1. (See also General Laws.)

The board, after due notice and trial, may by a vote of three fifths of its members revoke or suspend any certificate of registration granted by it.

#### New York State.

Enacted 1884. Amended 1887, 1889, 1893, 1895.

This act applies only to the portions of the State outside of New York, Kings and Erie counties.

The board consists of five members appointed by the Governor from nominees presented by the State Pharmaceutical Association. The law provides for the payment of expenses incurred by the board, but does not specify amount of compensation for the members. Meetings must be held at least quarterly.

Two grades of licentiate are provided for. Pharmacists must have four and assistants two years' experience before examination.

The fee for examination and registration is \$10 for pharmacist and \$8 for assistant. The fee for registration on certificate from another board within the State is \$5.

General dealers may sell "paris green, white hellebore, and other poisons for destroying insects or for use in the arts," proprietary medicines and "the usual domestic remedies in rural districts." Rural districts are defined as places "having no store where pharmacy is practiced." Domestic remedies are defined as "such as may be safely employed without the advice of a physician."

It is implied in section 186 that the board may revoke the registration of licentiates for just and sufficient cause.

The board may retain from penalties recovered under the law the expenses of prosecution, including counsel fees, the residue, not exceeding one half of the penalty, to be paid into the treasury of the county where recovered.

#### General Laws.

The following provisions apply uniformly throughout the State, including the counties of New York, Kings and Erie.

The licentiate, by examination, of any board within the State is entitled to registration without examination by any other board within the State upon complying with the formal requirements of the particular law of the district where he desires to practice. In order to obtain a license from any board the applicant

must show by affidavit or otherwise that he is a resident of the city or county for which the board was created, or that he intends to practice pharmacy within such district, and that he has not applied for or been refused a license by any board within the State within six months preceding.

The wrongful, negligent or ignorant omission to label any article, or any mistake in labeling the same, substitution, mistake or deviation in the filling of a prescription or order, "in consequence of which human life or health is endangered," is declared a misdemeanor.

Except when dispensed on prescription, every sale or gift of any poison or poisonous substance must be recorded in the usual manner, together with the address of some person known to the dealer, as a witness to the transaction. (This has been held by a police justice in New York City to require a record of all poisons, even though they are not included in Schedule A of the Consolidation act.) Except when dispensed on prescription, every poison or poisonous substance must bear a label giving the name and address of the seller, the name of the article and the word poison. Morphine and opium and their preparations, except paregoric and other preparations containing less than 2 grains to the ounce, must bear a scarlet label lettered in white letters.

Except on the verbal or written order of a physician, a prescription which contains more than  $\frac{1}{4}$  grain of opium, or 1-20 grain of morphine or cocaine, or 10 grains of chloral to the dose may not be refilled more than once.

It is a misdemeanor for any person except a graduate in pharmacy or medicine or one having two years' experience in pharmacy to compound a prescription except under the direct supervision of some one possessed of the foregoing qualifications. In case of death resulting from a violation of this provision the offense becomes a felony.

Licensed pharmacists are exempt from jury duty while actively engaged in the practice of their profession.

#### North Carolina.

Enacted 1881. Amended 1891.

The pharmacy law is contained in the act of incorporation of the North Carolina Pharmaceutical Association.

The Board of Pharmacy consists of five members elected, one each year, by the North Carolina Pharmaceutical Association and commissioned by the Governor. The members receive \$5 per diem and expenses. The secretary receives a salary which is fixed by the board. Any surplus of receipts over expenditures goes to the State association. At least one meeting must be held annually.

The law provides for but one grade of licentiate. When registered by examination the licentiate must have three years' experience. The board may, at its option, register without examination the graduates of colleges of pharmacy and the licentiates of other States. In towns of less than 800 inhabitants physicians may register as pharmacists without examination.

The fee for examination is \$5; for registration, \$3 for proprietors and \$1 for those in the employ of others. An annual renewal fee of \$1 is required.

General merchants may sell proprietary medicines, quinine, epsom salt, castor oil, essence of peppermint, paregoric, audanum in original packages, calomel, camphor and sweet oil.

The pharmacist is held responsible for the quality of drugs dispensed by him, except in the cases of patent medicines and of goods dispensed in the original packages of the manufacturer. Intentional adulteration or sale of adulterated articles is declared a misdemeanor.

The poison and label law corresponds to Form No. 1, with the following exceptions: Opium is omitted from Schedule A, and also the words "all other poisonous alkaloids and their salts." Schedule B includes opium and also the words "all other poisons." Every poison label must bear a skull and cross bones.

Registration is revoked by conviction for adulteration.

Registered pharmacists are exempt from jury duty.

#### North Dakota.

Enacted 1890. Amended 1898.

The Board of Pharmacy consists of three members appointed by the Governor from nominees presented by the North Dakota Pharmaceutical Association. The members receive \$5 per diem and their expenses, and the secretary a salary determined by the board. The surplus of receipts above expenditures is paid to the State association. The board must meet not less than twice nor more than four times a year.

The law provides for registered pharmacist and assistant pharmacist. The first must have four years' experience, but no age is specified. Assistant pharmacists must be not less than 18 years of age and have not less than two years' experience. Assistants are registered without examination on proof of age and experience. Graduates in pharmacy of such schools as are approved by the board, and licentiates of other States, are registered without examination, at the option of the board.

The fee for examination and registration is \$5; for registration as pharmacist on diploma or license from another State, \$8; as assistant pharmacist, \$1. An annual registration fee of \$3 is required of registered pharmacists, entitling them also to membership in the State association. Assistants pay an annual fee of 50 cents.

General dealers may sell patent and proprietary medicines which bear the "name of the contents and the pharmacist or physician by whom prepared," and the "commonly used medicines and poisons, provided they have been put up by a registered pharmacist."

Druggists are held responsible for the quality of goods supplied by them, except for those sold in the original packages of the manufacturer and proprietary medicines.

Willful adulteration, falsification or dilution of any medicinal substance, and sale of same, are declared misdemeanors.

The poison and label law corresponds to Form No. 1. A poison is defined to be any substance "which, according to standard works on medicine or materia medica, is liable to be destructive to adult human life in quantities of 60 grains or less."

Upon sworn complaint of three reputable citizens that any registered pharmacist is incompetent, intemperate, or sells intoxicating liquors illegally, the board shall give the person charged ten days' notice of trial, and revoke the certificate of the accused if the charge is sustained to the satisfaction of the board.

Fines recovered for offenses against the pharmacy law inure to the benefit of the Board of Pharmacy.

## Ohio.

Enacted 1878. Amended 1875, 1884.

The Board of Pharmacy is composed of five members appointed by the Governor from nominees presented by the Ohio State Pharmaceutical Association. The members receive \$8 per day and expenses, and the secretary a salary which is fixed by the board. Any member may be removed by the Governor for sufficient cause. The board is required to hold one meeting annually at each of the three cities Cincinnati, Cleveland and Columbus, and such additional meetings as they may determine upon.

There are two grades of licentiate.

The legal fee for examination and registration is \$3 for pharmacist and \$2 for assistant, with a triennial renewal fee of \$1 for the former and of 50 cents for the latter.

The law permits the sale by unregistered persons of patent and proprietary medicines and of 82 enumerated common drugs and "other similar articles," when put up by a registered pharmacist or wholesale druggist and bearing a label with the name and directions for use.

Fines assessed for violation of the law do not accrue to the Board of Pharmacy, but to the common school fund.

The laws relating to the labeling and sale of poisons are contained in different enactments and are in brief as follows: Morphine and its salts may be sold only by wholesale or retail druggists. No bottle or vial shall contain more than 1 dram of each, and must be wrapped in scarlet paper and bear upon both bottle and wrapper a scarlet label, printed in white letters. Every sale of morphine or its salts must be in a scarlet envelope, or in a vial with a scarlet wrapper and label as above. It is forbidden to transfer the morphine or its salts to any other container, but they must be dispensed from the original vial.

The general label law provides that every substance the indiscriminate or careless use of which would be destructive to human life must bear a label printed in red ink, with the common name, skull and cross bones, the words "caution" and "poison," and at least two of the most readily obtainable effective antidotes.

Arsenic when sold in less than 1-pound lots, except on prescription, must be mixed with soot or indigo in the proportion of 1 ounce of the former or ½ ounce of the latter to the pound of poison.

It is further provided that no article belonging to the class of substances commonly denominated poisons shall be sold or given away without bearing the word "poison," and the fact and circumstance of the sale registered, which must include the name, age, sex and color of the purchaser, the name of the person for whom the article is intended and the purpose for which it is to be used.

The law pertaining to the adulteration of food and drugs is also contained in a separate enactment, and its execution is in the hands of a "State Dairy and Food Commissioner." The section pertaining to the adulteration of drugs is as follows: "An article shall be deemed adulterated: 1, if when sold under or by a name recognized in the U. S. P. it differs from the standard of strength, quality or purity laid down therein; 2, if when sold under a name not recognized in the U. S. P., but which is found in some other pharmacopoeia or other standard work on materia medica, it differs materially

from the standard of strength, quality or purity laid down in such work; 3, if its strength, quality or purity falls be-

low the professed standard under which it is sold."

(To be continued.)



Alapurin is the name which has been applied to a new wool fat, which is practically white and odorless without the addition of water.

Fragarol is a substance which appears in fine, white, leafshaped crystals, and which, according to Bender and Hobein, suggests the odor of tube roses and strawberries. It has (*Pharm. Centralhalle*) already found considerable application in the manufacture of colognes and soap.

Salhyppnone is the trade name given to benzomethylsalicylic ester. It forms colorless crystalline needles, insoluble in water, difficultly soluble in ether and alcohol, and melting without decomposition at 118 to 114 degrees C. It is said to be valueless as a therapeutic agent, chiefly on account of its insolubility.

Sanoform.—A di-iodo salicylic methyl-ester has been proposed as a substitute for iodoform under the name of "sanoform." It contains 62.7 per cent. of iodine, and occurs in white, entirely odorless and tasteless powder which is not decomposed on standing nor by light. It melts at 110 degrees C, is fairly easily soluble in alcohol, very soluble in ether and in petroleum jelly.

Water-Miscible Fluid Extract of Coca.—A fluid extract of coca, easily miscible with aqueous fluids, wines, etc., may be made by using a menstruum containing about 25 per cent. of absolute alcohol, in which the constituents of the coca leaves, which cause the turbidity upon mixture of the fluid extracts and aqueous liquids, are insoluble, while the therapeutic effect of the preparation is not lessened.

Cobalt Carbonate as a Reagent for Free Hydrochloric Acid in the Stomach.—Contjean recommended cobalt carbonate for the above purpose in 1892, but its properties were first fully exploited by Kwiatnowski (*Courrier Medical*). The reaction depends on the action of the free acid on the carbonate, which produces a rose-red color, rapidly changing to blue. None of the normal contents of the stomach can affect the result. The carbonate must be prepared fresh every time.

A New Method of Extinguishing Quicksilver.—A new and original method of preparing a strong mercurial ointment has been proposed by E. Barbi, who takes (*Il Farmacista Italiano*) 500 gm. of mercury, and shakes it with a few grams of a strong decoction of saponaria root until no metallic globules remain vis-

ible to the naked eye. He then pours this into the already prepared and partially cooled ointment body.

Ferripyrrine Surgical Dressings.—Since the compound of antipyrine and iron chloride was introduced by Witkowski, under the name of ferripyrrine, as an astringent and styptic, a German manufacturer has placed on the market an 18 per cent. ferripyrrine absorbent cotton made according to a process which has been patented by him. The cotton so prepared is said to have the advantage over the ordinary styptic (ferric chloride) cotton that its action is more intense and is at the same time almost painless.

Formopyrin is the name given by Marcourt (*Rep. de Pharm.*) to a combination of antipyrine with formaldehyde. The preparation may be made by mixing a 40 per cent. formaldehyde solution with a solution of antipyrine in molecular proportions. On standing eight to ten days a crystalline precipitate forms which, upon subsiding, is dried on porous plates and purified by recrystallization from alcohol. The composition of the combination indicates the mere addition of the formaldehyde formula to that of antipyrine. Formopyrin melts at 142 degrees C. and is decomposed at a higher temperature with the formation of pyrrol. It is insoluble in cold water and ether, soluble in hot water, alcohol, chloroform and acetic acid. It forms permanent compounds with acids.

The Practical Value of the Synthesis of Caffeine.—E. Fischer speaks (*Ber. D. Pharm. Gesellsch.*, 1896, 1) of the practical value of the synthesis of caffeine as follows: It is apparent that this synthesis has yet no practical significance. As soon as it becomes feasible to methylate uric acid by some simple method the principle difficulty which exists in the artificial preparation of caffeine will have been overcome, and it will then be possible to speak more positively of its practical application. The consumption of caffeine is not extraordinarily large, and is estimated by the author to amount to about 1,000,000 marks (\$225,000) annually, but this consumption would no doubt be very rapidly increased if one could discover some cheap process for the preparation of the alkaloid, since it would then be used for the improvement of the numerous substitutes for caffeine now in use. Caffeine alone is, as is well known, the most valuable principle contained in coffee, the popularity of which is

largely due to its presence. Every substitute which contains no caffeine is therefore sure to prove only temporarily popular. On the other hand, if one is able to improve these substitutes by the addition of caffeine without materially increasing the price, their use would be very much popularized.

### Shall Doses and Some of the New Synthetic Remedies be Introduced Into the Next U. S. Pharmacopœia?\*

BY CHARLES RICE, PH.D.

Chairman of the Committee of Revision of the U. S. Pharmacopœia.

It may be regarded as quite certain that at the next pharmacopœial convention, to be held at Washington in May, 1900, two subjects will particularly engage the attention of the delegates then present, namely, the question of the introduction of doses and that of the admission of some of the new synthetic remedies. It is not too soon to discuss these topics now. Indeed, it is necessary to begin their discussion at once, so that, during the next few years, the delegates to each annual meeting of this section of the association may report back the discussion to their constituents, in order that the latter may present counter arguments at the next meeting, if they so desire, or signify their approval of the propositions.

#### PHARMACOPŒIAL CRITICISM.

Before turning to the topic proper, a few words on the subject of certain criticisms made regarding the last United States Pharmacopœia may not be out of place here. After the work had appeared (in August, 1898), it was subjected to review and criticism both in this country and in Europe, and, while competent critics were able to point out certain minor errors and defects, yet, on the whole, the general verdict was one of commendation and approval.

Among the medical critics in this country there were a few who found fault with the work because it contained, according to their views, too many drugs and preparations, or because it contained "a confusing multiplicity" of preparations of one and the same drug. Regarding the first mentioned criticism, it should be remembered that the Pharmacopœia is designed to meet the requirements of the whole country, and not merely those of some special section. From the standpoint of a single individual, whose experience is confined to his own neighborhood, the criticism may seem justified. But when the diversity of climate, race and nationality, habits, temperament, soil and natural resources in the different sections of this country are taken into consideration, it should not be surprising that the customs and preferences of prescribers differ. Since the Pharmacopœia is to serve as a guide to the pharmacist to enable him to supply remedies of a standard and uniform character, it follows that the work should contain everything for which there is a legitimate demand in any section of the country; and above all, every remedial agent frequently prescribed by the majority of physicians. No doubt, the Pharmacopœia, in its present shape,

contains many preparations which are comparatively, or altogether, unused by the profession in some sections of this country, while, on the other hand, they may be largely used in other sections.

It is one of the duties of the Committee of Revision to ascertain, in the best way it can, what drugs and preparation are sufficiently in use throughout the country to justify their introduction into the United States Pharmacopœia. The last Committee of Revision considered this matter quite carefully, and decided according to its best judgment, following the principle that it is better to retain any drug or preparation already official rather than to dismiss it upon trivial evidence. At the next revision, in 1900, it will no doubt be possible to make a more thorough weeding out, because more reliable statistics as to the frequency of use of the various articles now contained in the Pharmacopœia will then be available.

#### THE PROVINCE OF THE PHARMACOPŒIA.

Some of the medical critics point to the numerous preparations of one and the same drug, for instance, of opium, iron, mercury, etc., as being a "useless burden" on the memory of students of materia medica and on that of incipient practitioners. But they forget that the Pharmacopœia is not designed as a textbook of materia medica for students of medicine, each teacher of therapeutics having the right and privilege to advise his hearers to disregard those pharmacopœial articles which he may deem unimportant or useless. In other words, each teacher of materia medica or therapeutics has the opportunity of putting before his students a Pharmacopœia of his own construction, which will, no doubt, be quite limited in extent. And here it may be safely asserted that if every teacher of materia medica in this country were to produce such a work representing his own ideas, an examination of all these works would show that the views of the authors on the value of many remedies are widely varying. On the other hand, it would show that all of these works, without exception, would contain, uniformly, many remedies used and approved by the authors, which are not contained in the Pharmacopœia at all.

#### THE INTRODUCTION OF DOSES

While the construction and periodical revision of a Pharmacopœia must be the joint work of the medical and pharmaceutical professions, if it is to bear the authoritative stamp which it ought to possess, the finished work is of far more importance to the pharmacist than to the physician. To the latter it is mainly of interest only in so far as it tells him what drugs or preparations of any drug are official and therefore surely available to him, and what their strength is. To the pharmacist it is of primary importance, as he has to work by it to produce the remedies which the physician requires. It is certain, however, that the work would be more frequently consulted by the physician, and be of more practical value to the pharmacist, if it gave information concerning the average doses of the several articles. The absence of doses has frequently been complained of, and is, really, one of the most serious obstacles in the way of a more general popularization of the work. However, as is—or should be—well known, the charge of wilfully omitting the doses cannot be laid at the door of the Committee of Revision, because the latter was dis-

tinctly ordered by the Pharmacopœial conventions both of 1880 and 1890 not to insert doses in the Pharmacopœia. The blame, if there be any, must be shouldered by the medical profession, whose representatives deemed the introduction of doses unwise, because liable to create the impression that any overstepping of the limits of the dose laid down in the Pharmacopœia, even though it may have been justified and necessary in the judgment of the prescriber in any particular case, might lead him into trouble. It is believed, however, that there is no good reason to apprehend such a result. It would be very easy to choose such a phraseology in the passages referring to doses as would leave the prescriber at full liberty to adjust them at his discretion.

#### THE DETERMINATION OF THE DOSAGE.

While the introduction of doses into the Pharmacopœia could easily be effected without creating any risk to the prescriber, there is, however, another and more serious obstacle in its way, and that is the diversity of opinion prevailing among the authorities in therapeutics as to what are the average doses of the several remedies. Yet even this difficulty can be overcome, provided only that the medical profession at large will consent to at least authorize their representatives on the committee to act for them in this matter. It is a principle accepted and followed by the present Committee of Revision—a principle which testifies to the spirit of harmony existing between the professions of medicine and pharmacy—that any purely medical and therapeutical matters are to be decided by the medical members of the committee, even though they should form a numerical minority. It is therefore understood that the preparation of the list of doses, and the phraseology of the respective text, would be left entirely to the medical members.

It seems certainly worth while trying to ascertain whether an agreement on doses can be arrived at among the medical members of the next Committee of Revision. But to make the experiment at all, it is necessary that the medical members be at least authorized or permitted to do so by their constituents. Possibly nothing may come of it even then. But the writer of this paper shares the opinion of many others, physicians as well as pharmacists, that the insertion of doses in the Pharmacopœia is perfectly feasible, and will have to come sooner or later.

One of the first questions which occur to the prescriber or dispenser of a remedy with which he is not perfectly familiar is its average dose. For this he will have to turn to some other work of reference. Why should he not find the information sought in the book which is his authority for all other matters concerning the more important remedies in use?

#### THE INTRODUCTION OF SYNTHETIC REMEDIES.

It has been stated above that works on materia medica and therapeutics, written by any leading authority on these subjects at the present time, would or do contain many remedies approved and used by the authors themselves, which are not contained in the Pharmacopœia. Since the introduction of the synthetic organic antipyretics, hypnotics, antiseptics and other valuable new remedies, a large proportion of the teachers' textbooks and of the students' notebooks is

\* Read before the Section on Materia Medica and Pharmacy of the American Medical Association, at the Atlanta meeting.

taken up by facts and information relating to these remedies; and the literature relating to them, as any one may learn by referring to the Index Catalogue of the Surgeon-General's Library, far exceeds in some instances that which treats of well-known older remedies used for generations in the past.

At the time when the Sixth Decennial Convention for revising the Pharmacopœia met, in May, 1880, only a few of these synthetic remedies had made their appearance, and none of them had become sufficiently established to find advocates for its introduction into the United States Pharmacopœia. With the beginning of about the year 1884, however, the importance of some of these remedies became more and more recognized, and the financial success following the introduction of some of them gave a new impetus to synthetic research, which was in many cases again rewarded by large profits.

In 1890, the position which some of these remedies occupied was already so important that strong pleas were presented to the Pharmacopœial Convention in favor of their official recognition, but the spirit of conservatism and a sense of reluctance to put the stamp of approval upon articles which were protected by patents, trade-marks or other proprietary rights induced the convention to instruct the Committee of Revision to refuse them admittance. Since that time the number of these articles has constantly increased, and will still further and more rapidly increase as the century approaches its end.

#### TO KEEP THE PHARMACOPŒIA ABREAST OF THE TIMES.

Shall we permit ourselves to be instrumental in bringing about a condition of affairs when the physician and pharmacist will have to seek for information regarding the remedies most generally used in other books, outside of the Pharmacopœia? Is it not time to inquire whether the conditions connecting these remedies with the patent and copyright laws are of such a nature as to place them beyond the ethical boundary? Surely if the large majority of medical practitioners in this country does not deem it objectionable to prescribe such drugs as phenacetin, antipyrin, sulphonal, aristol, salol, homatropine, etc., are we not justified in considering the supposed ethical barrier as broken down?

These articles stand on a basis entirely different from that which is occupied by the ordinary proprietary nostrums, the composition or mode of preparation of which is kept secret. These new synthetic remedies have not even the shadow of secrecy about them. Their exact composition, chemical and physical properties, mode of preparation, reactions, etc., are thoroughly known, and controllable by tests or assay. The only peculiar feature about them is this, that those who discovered them, usually after the expenditure of years of labor and study, and after risking a large amount of money, retain such control over them as insures to them a fair return for their labor and outlay.

There is a positive advantage in the fact that most of these synthetic products are manufactured only in one place, by persons entirely familiar with the various processes, and always under the same conditions. We thus have a better guaranty of their purity and uniformity than if they were prepared promiscuously by any one who chooses to undertake their

manufacture. Competition, the enemy of prime quality, would soon make itself felt by the deterioration of many of these products, as they would appear on the market.

#### IN FOREIGN PHARMACOPŒIAS.

Foreign pharmacopœias have long recognized and admitted a number of these synthetic products, either under specially coined names, or under those by which they are universally known and sold. There is no advantage gained by coining for them new names, for the latter will but rarely be used in actual practice, and they are merely chosen to leave, as it were, a back door open, in case any one who defends their introduction into the Pharmacopœia should be hard pressed for arguments. The plain, honest way—to call them by their common names—is the best. Had the last—that is, the present—Committee of Revision known in time that salol was one of these very articles, the manufacture and name of which were protected by proprietary rights, the article would certainly not have been admitted into the Pharmacopœia. It was only after the appearance of the work that the committee learned the facts relating to it. Since salol is now in the Pharmacopœia, it is safe to

presume that it will remain there, even under its present copyrighted name. And if salol is to remain, why not take this as a precedent and introduce such other synthetic remedies as will be found to have survived ephemeral fame and really to merit recognition, when the time of again revising the Pharmacopœia shall have arrived?

#### TWO THEMES FOR DISCUSSION.

The two themes which the writer would suggest as worthy, among others, of consideration, and regarding which it is very desirable to obtain the sense of the medical profession, are the following:

1. It is proposed that the next Committee of Revision shall be authorized to state the average doses in connection with each drug or preparation used internally. The doses shall be designated by a sub-committee consisting of those members who are practitioners of medicine, and shall be given in such form as will leave full liberty to the prescriber to exceed the limits given.

2. It is proposed that the next Committee of Revision be authorized to introduce into the Pharmacopœia any compound or preparation whose composition, properties and mode of manufacture are known, and whose identity, purity and strength can be ascertained by tests irrespective of any proprietary rights that may be connected therewith.



*We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.*

*When sending for the formula of any unusual compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the labels used on packages of the compound should also be sent.*

**Red Color for Show Bottles.—T. F. H.**—The following yield bright red colors not readily changed by light:

I.	Parts.
Cochineal.....	10
Distilled water.....	1,000
Alum.....	8
Cream tartar.....	8

Boil well with two successive 500 parts of water and strain; when cold add 6 parts of sulphuric acid. Allow to stand 24 hours and filter.

II.	Parts.
Metallic cobalt.....	4
Nitric acid.....	16
Water.....	50

Dilute the acid with the water and dissolve the cobalt in the mixture, further dilute to 100 parts with water, add 88 parts of strong solution of ammonia and 2 parts of alum, dissolved in 50 parts of water. Make the whole to 500 parts with distilled water.

**Elixir of Juniper.—W. H. R.**—We are unable to state the formula of Franklin's Elixir of Juniper. The following is a formula recommended for a plain elixir of juniper berries:

Fluid extract juniper berries....	3 ij, 3 vj
Holland gin.....	3 iv
Simple elixir.....	3 x
Magnesium carbonate.....	3 j

Rub up the fluid extract with the magnesia; add the other ingredients and filter.

**Shoe Blacking.—C. E. B.**—The following formula furnishes a satisfactory article of shoe blacking: Take of ivory black (in very fine powder), 2 pounds; treacle (or molasses), 1½ pounds; sperm oil, ¼ pint; mix thoroughly and add of gum arabic; 1 ounce dissolved in strong vinegar, ¼ pint; mix well for a quarter of an hour and again once a day for a week.

German paste blacking is made after this formula: Ivory black, 1 part; treacle (or molasses), ½ part; sweet oil, ½ part;



mix as before; then stir in a mixture of hydrochloric acid,  $\frac{1}{2}$  part; oil of vitriol,  $\frac{1}{4}$  part (each separately diluted with twice its weight of water before mixing them).

The Universal Trade Association.—M. G. writes: "Some time early in April a gentleman came to my store, and showing me a list of hundreds of druggists through this and adjoining States, told me of a plan adopted by what I believe he called 'The Universal Trade Association,' to prevent and render absolutely impossible the cutting of prices by patent medicine vendors. This was to be accomplished by means of a stamp printed in various soluble colors to be sold or furnished the manufacturers of every patent medicine in the land, etc. In order to produce such a result each druggist (retail) was to be visited and asked to take one share of the association at \$5, and the names he showed me, he represented, had been written by the different druggists subscribing for one share of stock. Everybody in our town was there, and of course I had to be represented. We were not, however, asked to pay the \$5 until a certain date or a certain move had been made. He also told me that the organ of the association (which he said embraced the principal druggists throughout the West and South) was *The Retail Druggist*, and cost \$1 per year in advance, which I paid, taking a receipt therefor, with the understanding that the paper would be sent forthwith. The receipt is printed on a paper about 2 x 3½ inches, leaving a blank for name and date, which he filled in and signed, A. F. Gronwaldt.

"Not having heard anything from the paper, nor having seen any notice of the association nor its doings or workings, I have often wondered if it had any existence at all, save in the mind of the party who called on me; and as an editor is supposed to know all things, I respectfully submit the case to you.

"What do you know about it? Is it *bona fide* or a swindle, or am I overanxious in anticipating a speedy result from so vast an enterprise? Is there such a paper issued, or in contemplation, as *The Retail Druggist* published by the Universal Trade Association of Detroit, Mich? Please answer by letter or through the columns of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, which I do get and which I do read and value."

As to the existence of a corporation or firm operating under the name, "The Universal Trade Association," and its organ, *The Retail Druggist*, we can only say that this is well assured. As to their standing or responsibility we are unable to say anything definite. We are, however, familiar with the scheme of the promoters of the "association," and a more impracticable proposition than the one contemplated it would be difficult to conceive. The fact that a large number of retail druggists have been induced to subscribe and lend their aid to the furtherance of a scheme of the kind under operation by this "association" would simply seem to strengthen the idea held by many persons that pharmacists are poor business men.

An effort has been made to bring about an investigation of the books of the "association" with a view of determining what is being done with the large sums of money which have been paid into it by the retailers of the country; but the officers of the "association" refuse to accede to the propositions made as to an investigation, and nothing can be defi-

nately ascertained regarding the use to which the subscribers' money is being put.

An investigation of a discussion on the scheme of the Universal Trade Association, made by a committee of the American Pharmaceutical Association at the Denver meeting last year, resulted in the following presentment:

Your committee appointed to take into consideration the discussion of the subject of the plan of the Universal Trade Association beg leave to report that we believe that it was originally designed for a money-making scheme, which we condemn. However, we are disposed to believe that there may be some merit in the plan, but would caution the retail druggists of the country to let the plan alone until it shall be in the hands of representative pharmacists, and until the manufacturers approve of and consent to put the plan in operation.

This presentment was signed by the full committee, consisting of Henry Goetz of Chicago, C. E. Corcoran of Kansas City and Thos. P. Cook of New York. It would seem that further comment is unnecessary.

Raines Law Questions.—A. F. W. writes: "Will you kindly answer the following questions:

"1. Have I the right to sell Duffy's Whisky or Welfie's Schnapps without a license?

"2. Can I only dispense spiritus frumenti on prescription?

"3. May I dispense this prescription without license?

Tr. Capsici.....	3 iij
Tr. Zingiberis.....	3 ss
Ess. Ment. Pip.....	3 vj
Spts. Frumenti, q. s.....	3 viij

M. S.—Take one tablespoonful as directed,

It is not pretended that Duffy's Malt Whisky is other than a pure whisky, therefore it cannot, in our opinion, be dispensed by pharmacists unless a license is taken out and it is ordered on prescription by a physician.

Whisky can only be dispensed on the prescription of a physician, and even then only when a liquor tax certificate has been issued to the pharmacist dispensing it.

The prescription you quote is plainly intended as a means of evading the law, and were a test case made it would undoubtedly be considered a violation of the law to dispense it unless you possess a license.

## Correspondence.

### Does Soda Water in the Drug Store Pay?

EDITOR AMERICAN DRUGGIST:

In a recent issue of your journal I notice an article by Mr. Bodeman of our city in which he says that only 2 per cent. of the soda fountains in drug stores are a source of revenue to their owners.

I would respectfully take issue with Mr. Bodeman on that question. His figures might be somewhere near the truth if they were reversed, that is, that 2 per cent. of the fountains in drug stores do not pay. In my opinion a soda fountain ought to be a source of income in any drug store that can make a legitimate drug business pay, and in a good many which cannot.

Where a fountain does not pay I think it will in most cases be found that not enough attention is given to the management of that branch of the business. It is the same with soda water as with anything else. It demands careful study and close application to the details in order to insure a first-class product. If the drug-

gist furnishes that it is safe to say the public will do the rest, and his fountain will be a financial success.

J. H. WELLS.

CHICAGO, May 20, 1896.

EDITOR AMERICAN DRUGGIST:

In answer to Mr. Bodeman's article in the AMERICAN DRUGGIST, we wish to state that we have sold soda water in our stores for the past 15 years, and have always found it to pay at least 100 per cent. profit, and it also has a tendency to draw people to your store, and thus also increases general trade.

MERZ BROS.

CHICAGO, May 20, 1896.

EDITOR AMERICAN DRUGGIST:

By care and attention to all necessary details, I have always found my soda fountain a very important feature of my business and a source of revenue I could not afford to neglect, and I believe that any drug store with sufficient patronage to give it life could attain greater prosperity by an attractive soda counter intelligently looked after.

W. C. SCUPHAM.

CHICAGO, May 20, 1896.

EDITOR AMERICAN DRUGGIST:

We consider soda water to-day our "bread winner," in fact the only department of our business that pays us a profit, and do not see how a first-class drug store can be run without the soda fountain; and without any doubt the average druggist thinks the same, from the number in use.

ROGERS & DIAMOND.

CHICAGO, May 20, 1896.

### Palatable Castor Oil Patented.

EDITOR AMERICAN DRUGGIST:

SIR: A paragraph is going the rounds of the medical journals, giving a formula for making Palatable Castor Oil.

This formula is patented as per following list of patents:

No. 410,940, dated September 10, 1890.  
No. 470,715, dated March 15, 1892.  
No. 470,714, dated March 15, 1892.  
No. 524,513, dated August 14, 1894.  
No. 524,514, dated August 14, 1894.

and if druggists are induced to prepare this article themselves, it will lead to a multitude of law suits like those instituted in the "Drive Well" case.

Some scheming lawyer would like to take up this case for one-half the profits and I think journals should warn the druggist so that they may not be caught in a trap.

Yours very truly,

A. J. WHITE.

NEW YORK, June 3, 1896.

## Bibliography.

PROCEEDINGS OF THE SIXTH ANNUAL MEETING OF THE MAINE PHARMACEUTICAL ASSOCIATION, held at Mt. Kineo, Maine, June 25, 26 and 27, 1895, together with constitution, by-laws and roll of members. Portland, 1896.

The inconvenient size and arrangement of this volume, which has evidently been prepared for publication by some firm interested in the advertising matter contained in it, detracts somewhat from the pleasure of reading its interesting contents. Several papers of value in a business way were read, but they are inserted with the text of the discussions without any type accentuation, and will probably be entirely overlooked by all but the reader who makes it a point to read publications of this kind through word for word from beginning to end.





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### SCHEMES.

I AM frequently asked whether it will be advisable to go into this or that advertising scheme. I am usually able to say positively that it will be a mere waste of money to patronize it. Merchants are importuned constantly by misguided individuals or downright fakirs who have various illusionary schemes that they call advertising.

It is more apt to be a mere bunco game or a roundabout application for charity. Space in directories, programmes, catalogues, etc., is practically worthless. Occasionally a theater programme will bring results; but this is rare. Cards in post offices, hotels or depots are of no value whatever. Special writeups and a hundred and one book and coupon schemes that are constantly presented are simply different ways of imposing on those who do not know or do not remember what advertising is.

It is seldom a good plan to bite on another man's game. It is poor policy to go into a scheme with a lot of other people, even if it is a good one. Originate your own schemes and go it alone. Remember always what you are aiming to do. You are trying to attract favorable attention to your store, goods or methods. The means is best that reaches the most people, under the most favorable conditions, for the least cost. I have never been able to figure out anything that would take the place of newspapers and circulars. When you employ them you are doing direct advertising. You are able to say what you want to say, just when you want to say it, to exactly the people to whom you want to say it.

### Criticism and Comment.

A WELL PLANNED BOOKLET.

C. E. Rennecker (no town given) sends an attractive four-page "Price Current," intended, I should judge, for distribution through the mails. It is printed in blue

on enameled book paper. The pages are divided into three columns. The middle one is devoted to a list of drugs, sundries

## Pure Fruit Flavors,

Crystal Syrup, plenty of Ice, polished glasses, neat service, is the secret of our Soda Water success. Ten cents is not too much for a glass of our Ice Cream Soda. We give you three times as much Ice Cream as you can get for 5 cents, and then the quality of the cream. We can buy Ice Cream for 50 cents a gallon, but we do not do it. Our patrons deserve better Cream than that.

We use Weisgerber's Cream.

Ice Cream Soda, . . . . . 10c.  
Egg Drinks, . . . . . 10c.  
Phosphates, . . . . . 5c.

E. C. RENNACKAR.

and patent medicines, with prices. The prices are cut ones in some instances; in others regular. The remaining two col-

## You Are Not Being "Held Up."

We charge you ten cents for Ice Cream Soda because we give you a dime's worth. You don't get more than your money's worth wherever you buy it. 5-cent Ice Cream Soda means poor cream and little of it. We have the finest Cream that can be had, and we do not scrimp the amount we give you.

umns on a page are devoted to little talks on seasonable goods. The circular is neatly set and well printed; the little talks stand out prominently by reason

of the white space allowed between them; the result is a production that will attract attention and sell goods.

Some of the little ads could have been better; some could hardly be improved. I reproduce one on ice cream soda that is especially good because of the last two or three sentences. There is no attempt at brilliancy, but the ad. has the merit of simplicity and plain statement, and the

## Now about Ice Cream Soda

We make our own Ice Cream. We started three years ago. Our aim was to produce the very best possible cream, and that takes study, experiment and close attention.

We use pure cream, pure sugar, pure flavors—not an ounce of corn starch, a drop of milk or an egg.

Then, we use water—to run our motor. A rapid, unbroken, even motion alone makes smooth cream. We make it fresh every day, our big refrigerator holding forty-two quarts, and vanilla, strawberry and chocolate are always on hand.

J. A. Loomis & Son.

strength of a completed argument. Had the last four words been omitted it would not have been half as good.

USE FACTS.

The claim of superior cream is backed up by the maker's name, which, I presume, has local significance. This illustrates the advantage of putting facts into

## Perfumes

for

## ...A Song...

I have a bargain in perfumes to offer. While in Cleveland last week I got hold of ten pounds of the best goods,

Palmer's, Seeley's and Baldwin's, at greatly reduced figures. These perfumes sell everywhere at from 40c to 50c an ounce. While this lot lasts you get them at the uniform price of

**20 CENTS AN OUNCE,**

half what you usually pay; half what I will have to charge you when these are gone. Not over four ounces will be sold to one person.

your ads., of giving reasons for things, of relating your store news.

If, where the quality of the ice cream is mentioned, the advertiser had said something of this kind, "We put 4 ounces of ice cream in each glass. This

is about one-fourth of a pint," the ad. would have been better still.

In comparison with this ad. I reproduce from another source the one headed, "You are not being held up." It covers the same ground, and it is quite likely that many would prefer it; yet it is not so good an ad. because it generalizes too much. There is nothing to clinch the claims made.

#### A SALE WINNER.

The ad. headed "Now About Ice Cream Soda" is merely a fragment of a little booklet put out last year by J. A. Loomis



## With our Colored Fires.

We make them ourselves and know they will burn. You can get more celebration out of a quarter's worth of our red fire than you can out of four dollars' worth of other fireworks. We have a special non-smokeless fire to be used in the house.

Then we have liniments and plasters to use after the Fourth, all of the best, like everything we have. Only the best, whether fireworks, soda water or drugs.

**E. E. FISHER,**

BRIDGEPORT, - - CONN.

No. 2.

& Son, Easthampton, Mass. I give it here, with a slight alteration, as an example of the kind of talk that wins sales. People are taken into the confidence of the advertiser; they are allowed to see something of the inside of the business. Actual convincing information is given. It makes ads. readable and effective. If, instead of hackneyed phrases and commonplace generalities, you put in little items of news that relate purely to your own store or business, your advertising will always be distinctive and interesting.

#### A STUDENT OF BUSINESS HINTS.

L. J. W., sends ad. headed, "Perfumes for a Song," and says: "I have been a careful student of this department and believe that I have learned a good deal about advertising. My ads. are very different from what they used to be, and I frequently see direct returns, which is something I never used to see. But I want to know what is the matter with the inclosed ad.? As nearly as I can judge it is a pretty fair ad., but though it was published a week it brought in but two or three customers."

#### A GOOD AD. WON'T PAY IN A POOR MEDIUM

This ad. is a very good one. I see no reason why it should not have pulled better. Something is, of course the matter. The ad. may have had a poor location in the paper. The paper itself may be at fault. Its circulation may be small and among the wrong class of people. If, as I understand it, this paper is a weekly, the larger portion of its circulation is in the country. The ad. would appeal less there, and those who wanted to buy could not afford to make a trip to town for a purchase of this kind. After all is said, it is hard to understand why the ad. did not bring greater results. If you will study local conditions carefully I believe you will be able to find the reason. The ad. is all right. As you are making this drive on perfumes for its advertising effect I should advise you to try it again and make more of an effort. Get out a neat little circular and distribute it thoroughly. Try the experiment of doubling your space for an issue or two. Write another ad. on the same general lines as this one, but limit the sale to a certain number of days. State this positively—"Not an ounce can be had at this price after 10 o'clock Saturday night." Call attention to the ad. by means of two or three reading notices. A special sale of this kind often sends light into the dark places of advertising—enables the advertiser to test methods and mediums.

#### To Celebrate The Fourth.

The increase in the use of fireworks of elaborate design in large cities has deprived the city drug trade of the interest which they formerly took in the manufacture of colored fire, etc.; but there are still many sections where, by a little judicious advertising, a considerable quantity of fireworks can be disposed of by the enterprising druggist, and for these we have published in another column a very comprehensive article on colored fires and their preparations; and with a view to aiding in the sale of these when made we present herewith a suggestion for an advertisement which, with some modification, will meet the requirements of the druggists in many cases.

#### Soda Water Advertising.

BY J. D. FOUNTAIN.

There is really not much to say about soda water. It is cold, it is made from pure materials, it is prepared tastefully, it is served properly—that is all. Tell this and you have nothing else to say. But there must be art in the telling if you want others to believe you. What you say must not only be true but convincing; not only accurate but interest-

ing. There are many people of many minds. You must change your style of advertising and your method of phrasing until by experiment you find out that you have caught the style and method that wins in your particular territory.

Success alone is a test of merit in this particular art, and what produces success under one set of conditions will prove



## The Bicycle Bell

rings the sweet old tune of "Soda, 5 cents a glass!" But there is soda and soda. If you are over our way on your wheel this evening try ours. You will find a wheel rack at the door. We want the bicycle trade of this town and we are going to have it. Bloomers admitted.

BRUSHES AND COMBS.

PAINTS AND OILS.

ARTISTS' MATERIALS AND STATIONERY.

J. H. FIELD, Somerville, N. J.

No. 4.

a positive failure under differing conditions. While nothing can be said finally as to what is the best, it is generally easy to distinguish between the good and the bad in this as in other advertising. In the last issue of the AMERICAN DRUGGIST Mr. Manning spoke rather disparagingly of the use of humorous cuts, as follows:

"As a rule, I do not approve of the use of humorous cuts in drug advertising. There would be less objection to their employment if they were used in connection with such subjects as those here chosen. I would hardly care to tack a prescription talk, or an ad. for the

business in general, to an illustration of this kind. The best that a humorous cut can do is to attract attention, and that is not the best use of illustration. I am well aware that many people think differently, especially the artists who conjure up illustrations—it is pretty hard to get the opposite idea into the heads of many of them without trephining their skulls—yet my own experience has taught me to use the funny cut with caution. Nonsense will attract attention and amuse people, but it is sense that sells goods. Perhaps a little nonsense now and then used with discrimination may serve

value to the readers of the journal; and they should bear in mind that many of these illustrations are capable of being used with different reading matter and for totally different purposes than those for which I have designed them. It is, in fact, astonishing to see how many and how varied are the ideas which suggest themselves for utilization in connection with the same cut where one has studied the subject, and fertility of the imagination is very much increased by a little practice in this direction.

### The Five Best Books.

Our esteemed contemporary, the AMERICAN DRUGGIST, recently asked the opinions of a number of pharmacists, among whom were some well-known authors and teachers, which they considered the five best books for beginners in pharmacy. The question is an exceedingly important one, and deserves deeper consideration than it received on this occasion. It is one that no person can answer off-hand, in a way that will be of the slightest benefit to those most highly interested in its proper solution. By the nature of the replies received it almost seems as if the question had been misunderstood. Most of them appear to have tried to select the five best books published on pharmacy and subjects germane thereto. But the five books best suited to a student in pharmacy need not necessarily contain any particular book that happens to be the best work on pharmacy. In fact, if the choice had been made in anything like a proper scientific method, it is quite likely that one or more inferior works could have been embraced in the selection. The list that showed the greatest popularity contained the "United States Pharmacopoeia," "Remington's Pharmacy," "United States Dispensatory," "Sayre's Materia Medica," and "Gray's Botany." To test the soundness of this decision, the first thing to do is to strike out from each of the five books all that is not elementary, and, therefore, unsuited to a student. After this has been done, then we should number them, and strike out from Nos. 2, 3, 4 and 5 everything contained in No. 1. Next strike from Nos. 3, 4 and 5 all that is found in No. 2. Repeat the cancellations with all the rest in the same manner. It is quite certain that such a test as this would wipe out two or more of the list, and leave room for some less known, and, perhaps, less ably written works that happened to contain material that could not be canceled, and would therefore be useful to a student of pharmacy.—*Merck's Report.*

### A Department of Manufactures and Commerce.

Howard B. French of the firm of Samuel H. French & Co., Philadelphia, said recently that the paint business was only fair, but with the change of administration he was rather sanguine, as he expected a good trade for the next three or four years. Mr. French takes a great interest in the movement for the establishment of the Department of Manufactures and Commerce by the Government, the head of which is to be a member of the President's Cabinet.

This movement was originated by the Paint, Oil and Varnish Association of the United States and since then has

been taken up by the National Association of Manufacturers. Both associations are now pushing it and recently legal bodies have communicated with other Senators and Congressmen, urging them to support Senator Frye's policy in relation to this subject. For the last ten years there have been efforts made to secure the enactment of laws for the providing and establishing of a department in the Federal Government especially devoted to the commercial and industrial interests of the country. Lack of general appreciation of the necessity for such a department and the absence of organized support have caused the failure of such movements. With the extraordinarily rapid growth in the manufacturing interests of the country there has



**X Rays**

clearly exhibit the purity of our soda and the rush to get it. Hot nights you cannot sleep for thinking about it—if you missed it.

PURE WATER,  
PURE FRUIT JUICES,  
PURE CARBONIC GAS,  
PURE CANE SUGAR.


It's the same with our Drugs—all pure, all compounded with brains and skill. Doors open all night.

**REEDER BROTHERS,**  
4th Ave. and 31st St., NEW YORK.  
No. 5.

to put your readers in a good humor and make them more receptive to the sense that follows. It is in the abuse rather than in the use of humorous cuts, that the objection lies."

On first reading this paragraph I thought that I did not agree with it at all, but upon reading it over again I found that Mr. Manning did not condemn the use of cuts but rather their misuse; and I must agree with him in thinking that a humorous cut, misused, is a most lugubrious thing.

I believe, however, that in advertising soda water there is a special fitness in the use of humorous and appropriate cuts, and at the suggestion of the Editor of the AMERICAN DRUGGIST I have prepared a few series of illustrated advertisements which may offer some suggestion of



**THE RAINES BILL,**

or any other bill, does not keep the crowd away from our Soda Fountain. The girls all say it is the best soda in town—and the girls know. Come in to-night—open until eleven P. M. on Saturdays.

PURE DRUGS,  
PURE SODA,  
A BIG STOCK OF PAINTS.

**C. H. SWENSON, Jamestown, N. Y.**  
No. 6.

come a broader understanding of the importance of the suggested new government department and a wider recognition of the necessity for its establishment. The crowding of additional functions upon the existing departments from time to time has also served to emphasize the needs for measures of relief for the established executive branches of the Government. At no time, however, has public interest in the creation of a Department of Manufactures and Commerce been so strongly marked and so emphatically expressed as at present. This is due to the active support which is being given to the present movement by several of the most influential organizations in the United States, which have taken the matter up simultaneously and with the determination to urge upon the public and upon Congress the importance of the proposed new department.



## NEWS OF THE FORTNIGHT.

### Rebate Plan in the West.

The Southern and Western wholesale druggists feel and acknowledge the importance of supporting the rebate plan (p. 841).

### Cincinnati Druggists Organize.

A permanent organization of the retail drug trade of Cincinnati has been formed under the title of the "Academy of Pharmacy," which is expected to prove a potent factor for good in pharmaceutical affairs. Its organization grew out of the pure food prosecutions (p. 841).

### Storm Swept St. Louis.

Many wholesale houses in St. Louis communicate through our columns to the drug trade of the United States their report of the condition of affairs prevailing in that city as a result of the storm (p. 842). Their letters are supplemented by the detailed report of our regular correspondent (p. 843).

### Association Meetings.

The Texas Pharmaceutical Association had a most interesting and well attended meeting at Dallas, which is reported on page 844. The annual meeting of the Indiana and the Arkansas associations are also reported (pp. 845-846).

### Ohio.

This State continues to be a center of activity. An attack upon the Bellaire Food Preserving Company has just appeared in the newspapers, and is looked upon as possibly being a covert attack upon the Hon. J. E. Blackburn, the Republican nominee for the office of Food and Dairy Commissioner, who was at one time interested in the company, though he claims to have severed his connection with it (p. 850).

### Obituary.

Boston has lost two prominent druggists during the fortnight, one Elias Craft, who died at the advanced age of 99 years of active life, having been a man of note 50 years ago, and the other, Chas. G. Haley of the wholesale firm of Chas. E. Haley & Co., dying at the early age of 29.

### Meeting of Western and Southern Wholesale Druggists.

On May 26 and 27 the meeting of the Western and Southern wholesale druggists was held in the Southern Hotel, St. Louis. This is the time at which the Western druggists meet and this year the Southern organization joined with them, as their interests were of a common nature. At the meeting great stress was laid on the continuance of the rebate plan, which is now going through a suit in New York. M. N. Kline, chairman of the Proprietary Committee of the N. W. D. A., attended the meeting and escaped the cyclone by a few hours. It was his intention to leave St. Louis on the 27th ult., late in the evening, but as the business of the association was finished sooner than was expected, he managed to take the train at 1 o'clock and thereby escaped the cyclone, which arrived about 3 p.m. Mr. Kline has received a few letters from some of his friends who stayed there and they state that during the storm things were very interesting in the Southern Hotel, although none of them were hurt.

### An Important Capture in the Phenacetine Case.

BOSTON, June 4.—A man giving the name of Andrew J. Bartlett was arrested yesterday by the officers of Division 1 upon a charge of having in his possession phenacetine and sulphonal which had not been imported through Schieffelin & Co., but by Alonzo L. Bridges, a person for whom they have been on the watch for some time in order to serve a writ in favor of Schieffelin & Co. of New York. Before the United States commissioner to-day the man was charged with importing 28 ounces of phenacetine and 6 ounces of sulphonal, and the case was continued until next week.

### Cincinnati Druggists Organize.

CINCINNATI, Ohio, June 5, 1896.—After a good deal of hard work the druggists of this city have at last succeeded in banding themselves together in a permanent organization. This was effected a few days ago. For a long time the druggists had this in view, the needs of such an organization being manifest since the pure food laws have been so vigorously enforced. Heretofore, whenever the druggists wanted to discuss anything of importance to their business they have had to call special meetings, and as soon as the business was transacted the organization, being a temporary one, was disbanded. Several months ago, it will be remembered, a temporary organization

was formed and a committee was named to go before the Legislature at Columbus in order to attempt to have the Pure Dairy and Food Laws amended. The amendment, as readers of this journal well know, passed the House, but was lost in the Senate. This was formally reported at the meeting in question.

### THE ACADEMY OF PHARMACY OF CINCINNATI.

There were probably 40 of the most representative pharmacists in the city present when the hour for the meeting arrived. The druggists assembled in Room D of the Odd Fellows Temple Building at the northwest corner of Seventh and Elm streets. Albert Meininger, the well-known Cumminsville druggist, who is also a member of the Ohio State Board of Pharmacy, presided. Frank Freericks, the popular Walnut Hills druggist and ex-president of the Alumni Association of the Cincinnati College of Pharmacy, was appointed to record the minutes. The first business was the reading of a constitution adopted by the committee appointed for that purpose. After some friendly arguments it was decided to call the organization the Academy of Pharmacy of Cincinnati. No restrictions were placed on the membership, all reputable pharmacists of the city and vicinity being eligible. The objects of this new organization are to further the interests of the druggists of the city and vicinity, to unite for mutual protection, and to improve the business from a scientific standpoint.

### ON THE LINES OF THE ACADEMY OF MEDICINE.

In short, the Academy of Pharmacy is to be like the Academy of Medicine, which was founded by local physicians some years ago. The benefits of the last named organization have been noticed time and again, and it is hoped that the association will have the effect that its promoters expect. The new association will also have the effect of bringing the druggists together in a social way, something that has not been accomplished heretofore. There are a number of other ways in which the business and those who follow it will be benefited by the new society. The druggists seem to be heart and soul in the new venture and are determined to make their organization one of the factors in the local business world. Its success seems to be assured as there are 75 charter members. The initiation fee system is done away with, and members will only be asked to contribute \$2 a year as dues. This money is to be paid in advance and will be used to defray current expenses of the organization. Every pharmacist who was present at the first meeting paid in the above amount.

### OFFICERS ELECTED.

The election of officers was the next business in order, and the result was as follows: President, Albert Meininger; first vice-president, Alfred DeLang; second vice-president, Joseph Blaeser; secretary, Frank H. Freericks; treasurer, Otto Lippert; Board of Directors, John Weyer, Theodore Wetterstrom, W. L. Reum, Robert Groenland, Martin Dodsworth, John Koenig, William F. Schnell and Otto Rauchfus. The first three are to serve three years, and the last three are to hold office one year. The term of office began with the date of the meeting. The meetings will be held on the second Tuesday of each

month and the annual meeting will be held on the second Tuesday in May. One of the important matters to come up for future discussion, which was suggested by Secretary Frericks, is a proposed consultation with the members of the Academy of Medicine for the purpose of arranging between the two organizations a set of formulas that will largely take the place of the proprietary medicines now being prescribed to quite an

extent by physicians. These formulas are to be given to the members of both academies and the physicians will be asked to act accordingly. By this plan better remedies can be prepared at a larger profit for the local retail druggist and the patient will profit by the venture. The organization of the Academy of Pharmacy here will no doubt be followed by the organization of similar societies in various parts of the country.

## STORM SWEEP ST. LOUIS.

**Extent of the St. Louis Disaster as it Affects Druggists—Many Drug Stores Wrecked—Druggists Killed and Injured—Estimate of the Loss to Property—St. Louis Druggists Form a Relief Committee—After the Storm—What the Wholesale Trade Say.**

THE following communications have been received in response to a letter from the Editor of the AMERICAN DRUGGIST, and when taken in conjunction with the detailed account furnished by our regular correspondent, which follows, will furnish an adequate idea of the loss sustained by the druggists of St. Louis:

### AMONG THE WHOLESALE TRADE.

#### The Antikamnia Chemical Company.

The cyclone in its ravages did not touch the district wherein the drug trade is located, though a few retail stores were damaged to a greater or less extent.

We have no data upon which to base an estimate of the loss to the drug trade, but a few thousand dollars will cover it. Yet the damage to the city is incalculable, and though St. Louis is not asking for outside assistance all voluntary contributions are cheerfully received, and donations may be sent to the Relief Fund, care Hon. C. P. Walbridge, Mayor of St. Louis, and it will be distributed where it will do the most good.

THE ANTIKAMNIA CHEMICAL COMPANY,  
FRANK A. RUF, Pres't and Treas.  
St. Louis, June 3.

#### Mellier Drug Company.

We desire to thank you very much for your kind expressions of sympathy. It is very gratifying to remark, however, that the course of the storm was not through the central portion of the town, and we do not believe the manufacturers either of chemicals or pharmaceuticals, as also the jobbing druggists, sustained any serious damages. There were quite a number of retail druggists whose places of business were almost entirely destroyed.

Our Mr. Albin Mellier is chairman of a committee for soliciting contributions from the manufacturers of chemicals and pharmaceuticals, and any contributions would be most gratefully received and utilized in the proper channels.

MELLIER DRUG COMPANY.  
St. Louis, June 3.

#### J. S. Merrell Drug Company.

The drug trade proper, wholesale and retail, has suffered measurably only. Loss of life, however, is considerable. It is this which we deplore. May a further dreadful affliction of the kind be spared the country.

J. S. MERRELL DRUG COMPANY.  
St. Louis, June 3.

#### David Nicholson.

We are pleased to say the business interests suffered very slightly in the late

disaster. The damage is mostly to residences, churches and manufacturing plants.

Among the houses destroyed are many which owners may not be able to rebuild, as comparatively little cyclone insurance was carried in our city. The small number of deaths caused by the disaster is truly astonishing. With our thanks for the sympathy expressed, we remain,

Yours very truly,  
DAVID NICHOLSON.

St. Louis, June 4, 1896.

#### Lambert Pharmacal Company.

We are in receipt of your very kind letter of the 1st inst. We hardly think it possible, at this time, to say to what extent the drug trade suffered from the cyclone, nor do we think that any plans are being formed by any one part of the profession for the relief of the unfortunate members thereof, although in a general way various plans for the relief of the sufferers are being formulated and will soon be put into practice.

Thanking you for your expression of sympathy, we are, Yours truly,  
LAMBERT PHARMACAL COMPANY.  
St. Louis, June 4, 1896.

#### Moffit-West Drug Company.

We desire to thank you for your kind expressions of sympathy. Fortunately the jobbing drug trade of the city together did not sustain a loss to exceed \$500, but quite a number of our friends among the retail trade who were located in the storm's pathway were seriously damaged. There is a subscription list out among the retailers of the city for the benefit of the retail druggists who have been damaged by the storm. Permit us to thank you sincerely for your sympathy and proffered assistance.

MOFFIT-WEST DRUG COMPANY.  
St. Louis, June 3.

#### Battle & Co.

As far as we know, very little damage was done among the wholesale druggists and manufacturing pharmacists or chemists, though a number of retail druggists suffered. A great number of people, many of them poor, are in need of help. The Merchants Exchange has organized a Relief Committee which will thankfully accept voluntary contributions from any source.

We thank you for your letter and the friendly spirit of it.

BATTLE & CO. CHEMISTS' CORPORATION.  
St. Louis, June 3.

#### F. Hammar Paint Company.

We are in receipt of your favor of June 1, and beg to assure you of our appreciation of your expression of sympathy in the recent disaster. As the papers have told you the extent of damage and loss of life is not as great as was originally estimated, and we think, from the present evidences of St. Louis' public spiritedness, that we shall be able to take care of all the cases of need without applying to other cities for aid. The course of the cyclone while nearly a mile wide extended over the southern part of our city only, which contained very few manufacturing establishments or business houses.

As to the amount of damage to the drug trade in St. Louis we cannot speak definitely, as we have no particulars; but know of no cases in this particular line where greater damage has been sustained than the unroofing of building or broken show windows. Everything has been put into good order with marvelous speed, and, with the exception of the trees, there will be very little trace of the disastrous tornado in St. Louis by the end of the month.

F. HAMMAR PAINT COMPANY.  
St. Louis, June 3.

#### Larkin & Scheffer.

Many thanks for your expression of sympathy. As yet no estimate can be placed on the loss by damage to stock, building, etc., of the retail trade. The damage to wholesale trade was very slight. There were probably 15 retail drug stores in the path of the tornado.

LARKIN & SCHEFFER.  
St. Louis, June 3.

#### Mallinckrodt Chemical Works.

We believe that several retail drug gists in the southern part of the city sustained material losses through the recent tornado, but we are not advised as to the extent of the losses.

MALLINCKRODT CHEMICAL WORKS.  
St. Louis, June 4, 1896.

#### Meyer Brothers' Drug Company.

The Hopkins-Weller Drug Company had part of the roof of their house torn off and walls and chimneys damaged. Moffit-West Drug Company had also considerable damage on their roof and to their windows. Collins Bros Drug Company had very little damage to their house, but one of their drivers was killed and a lot of goods that were on the wagon damaged. J. S. Merrill Drug Company escaped without a scratch. Meyer Bros. Drug Company were considerably damaged in their warehouse on Broadway and Clark avenue by having the windows blown in; damage to the goods, however, was very small.

Of the retail druggists, nine, as per list given herewith, had their stocks almost totally destroyed: J. T. Fueger, Park and Jefferson avenues; R. Sassman, Park and Mississippi avenue; George Berg, Jefferson avenue and Russell; J. E. Koch, Jefferson and Shenandoah; W. C. Bolm, 1701 Park avenue; T. Hagenow, Fourteenth and Chouteau avenue; W. K. Ihardt, Fourteenth and Lynch; H. Braun, Seventh and Chouteau; E. A. Sennewald, Eighth and Hickory.



In spite of this dire calamity that has struck our city, the citizens of this commonwealth have immediately put their heads together and have subscribed already over \$250,000, besides having made large contributions of merchandise, clothing, bedding, mattresses, furniture and provisions to relieve the most urgent want and distress, and you can assure the readers of your valuable journal that when the National Republican Convention meets here on June 16 that they will find everything in first-class shape and condition to meet their guests. The business portion of the city was but slightly touched by the tornado, which was very fortunate indeed. It was also an act of Providence that this tornado should strike the residence district at 5 o'clock in the evening, for had this calamity struck this city at 7 o'clock the loss of life would have gone into the thousands.

GUSTAVE J. MEYER.

St. Louis, June 5, 1896.

#### Hopkins-Weller Drug Company.

Your favor of the 1st with expressions of sympathy for us in the great disaster to our city is received, and we thank you for your kindly interest in our welfare.

The wholesale drug trade were situated on the edge of the path of the tornado, and while all of them suffered a little from damaged roofs, broken windows and some water, none of them suffered any great loss—from a few hundred to two or three thousand. A driver of a wagon for one of the wholesale stores was killed on the streets by a falling telegraph pole.

The loss to the retailers is quite large, as some 30 or 40 were damaged, and some even totally wiped out. Several of them lost members of their families. There were so many losses that we cannot attempt to enumerate them to you.

GEO. K. HOPKINS.

St. Louis, June 5, 1896.

#### Anheuser-Bush Brewing Association.

The disaster which befell our city is beyond description. The entire territory bounded by Chouteau avenue on the north and Russell avenue on the south, a distance of about 1 mile, and from the entire western city limits to the river, is almost completely destroyed. The storm went across the Mississippi and demolished part of the upper roadway of the Eads Bridge and almost wiped the city of East St. Louis from the face of the earth.

ANHEUSER-BUSCH BREWING ASSOCIATION.

C. J. STAUDINGER.

St. Louis, June 5, 1896.

#### Peacock Chemical Company.

We are glad to state that, although the destruction in the path of the cyclone was appalling, the main business portion and principal resident district of our city escaped uninjured.

The drug trade, as a whole, suffered little if any damage.

The damage to the Eads Bridge caused a temporary delay in the handling of freight, but that has now been obviated, and both incoming and outgoing freight is being handled with usual promptness.

The prompt and liberal donations by our citizens is rapidly relieving all distress, and we hope soon to have removed all signs of the disaster. Thanking you for your expressions of sympathy and assur-

ing you that we will be well able to take care of the afflicted, we remain,

Yours very truly,

PEACOCK CHEMICAL COMPANY,

THOS. P. HALEY, JR., Pres't.

St. Louis, June 3.

#### Herf & Frerichs.

We are informed that the factory of Herf & Frerichs suffered considerable damage, three smokestacks and a portion of a roof having been blown down. The damage is not sufficient, however, to interfere with the transaction of business.

### DETAILS OF DAMAGE IN THE RETAIL STORES.

(From our Regular Correspondent.)

St. Louis, June 2.—The great storm which swept over this city on the afternoon of May 27 included in its destruction the homes and stores of many well known pharmacists. Not a single drug store in the storm stricken district escaped uninjured. As a rule the pharmacist suffered more than any of his neighbors. This may be attributed to several causes. They usually have large plate glass fronts, which left them at the mercy of the flying timbers, etc. Their stock is of a nature to be easily damaged, and there is always a large amount of display goods in the front part of the store. The beautiful, innocent-looking show globes in the windows, with their contents of iodine, iron and acid solutions, caused much damage when shattered and their contents splashed over stock and fixtures. With the front of the store blown in, the show-cases broken and upset, the shelf bottles scattered over the floor, and torrents of rain pouring in, there was left a sight which appalled many a pharmacist after the crash on that memorable afternoon.

#### PHARMACISTS KEPT BUSY.

But scarce had the fury of the storm abated when prescriptions came pouring in and the druggist and his clerks were besieged by injured and frightened victims of the tornado. People rushed to the familiar corner drug store to ask questions and telephone in regard to some friend or relative, but the pharmacist was too busy with prescriptions for the injured to answer questions, and all telephone connection was shut off. It was a common thing to see the pharmacist searching among the debris for his stock of bandages and lint, or overhauling the pile of broken bottles for ingredients wanted in a prescription. Situated as he was, hearing the sad tales of injuries and death from so many, he soon began to feel that he was among the lucky instead of unfortunate ones. At nearly every stand in the storm stricken district trade has been brisk ever since the 27th, and it goes a long way to heal up the sore spot afflicting so many.

#### AID FOR AFFLICTED DRUGGISTS.

The pharmacists of neighboring cities were prompt in kindly offering assistance to their brethren in distress, but as yet none has been accepted. The next morning after the storm the wholesale houses notified all their customers who had been visited by the cyclone that they stood ready to give any assistance which might be needed. It became necessary for several pharmacists to move into other quarters at once, and the delivery wagons of the wholesale houses were placed at their disposal immediately. H. F. Hassebrock,

a well-known north side pharmacist, at once set to work to obtain relief for those who suffered loss. A meeting was held at the office of the Meyer Bros.' Drug Company, and C. F. G. Meyer, Prof. Francis Hemm, Prof. J. M. Good, H. F. Hassebrock and M. W. Alexander were appointed a relief committee. A plan has not been fully decided upon. A number of the unfortunate druggists do not feel like accepting aid direct, as they are only temporarily embarrassed. For these, arrangements will probably be made to tide them over until they get on their feet again. Others who were not on so firm a footing will be given a lift, and the generous pharmacists of the city and State will be given an opportunity to lend a helping hand.

#### INDIVIDUAL DAMAGES.

Probably the saddest case recorded among the druggist fraternity is that of our worthy pharmacist, Wm. C. Bolm, who owned an elegant two-story brick building at Seventeenth street and Park avenue. On the ground floor he had one of the most complete little drug stores in the city, and the second floor was occupied by his happy family and his aged mother. All was wrecked, the building store and stock demolished. And the saddest of all, the cheering words and happy smiles of that kind hearted old mother are hushed forever, while Mr. Bolm's oldest son also came near being numbered with the dead. Two other buildings in the neighborhood belonging to him were also wrecked.

Theodore J. Poppitz, Ph.G., a graduate of '96, was returning from a visit in East St. Louis when the storm overtook him on the Eads bridge. The members of the St. Louis Drug Clerks' Society have just performed the last sad duty for their beloved member. He was the oldest son, the hope and pride of his father's household. His sunny disposition and many ways made him a favorite with his classmates at college, where he made a bright record.

J. T. Foeger, Jefferson street and Park avenue, president of the St. Louis Apothecaries' Society, was one of the heaviest losers from the storm. The immense three-story brick building in which he had his store came tumbling down and Mr. Foeger and his clerks feel fortunate that they escaped with their lives. He had an elegant store with a very large stock of goods, most of which was ruined and the fixtures were badly damaged. In about a week he expects to be ready for business just across the street. It takes more than a Missouri cyclone to discourage Mr. Foeger.

J. P. Methudy, California and Russell avenues, lost about \$600 worth of goods, and about half that amount in fixtures, etc. A showcase containing \$100 worth of new chamois skins was blown out of the store and either carried off by thieves or by the wind, as it has not been seen since.

R. S. Sassam, Twentieth street and Park avenue estimates his loss at nearly \$1,000. The loss was about equally divided between stock and fixtures. The building was so badly damaged that he is moving out to 2854 Lafayette avenue, where he will be ready for another whirlwind in about a week, so he says.

Theo. F. Hagenow, Fourteenth street and Chouteau avenue, was among the heavy losers; \$1,500 will hardly cover his loss. A large stock of goods stored in the cellar was completely ruined. His

loss on household effects was also very heavy.

Hopkins & Weller Drug Company, at 612 North Second street. Roof blown off, carrying a part of the front wall with it. Skylight and windows blown in. The building was flooded. Loss, \$3,000. A panic occurred among the men and women employed there. All got out in safety.

The South Broadway Pharmacy, 1600 South Broadway, are out about \$200 on their deal with the wind.

H. F. Helwig, Twenty-second street and Choteau avenue, is \$600 worse off than before the storm. He has been doing a rushing business ever since, and begins to feel somewhat reconciled.

F. W. Sennewald, secretary of the Missouri Board of Pharmacy, is not now in the retail drug business, but he loses nearly \$5,000 worth of property. On coming home after the storm he found everything demolished.

The H. C. Gempff Drug & Paint Company, 1484 South Broadway, lost nearly \$1,000 worth of stock, most of it stored in the cellar.

Henry Braun, Seventh street and Choteau avenue, is smiling as happy as ever. Says he is glad he is living, and one would hardly think he was damaged to the extent of at least \$1,000.

C. Schaefer & Son, 1526 Choteau avenue, were in the midst of the cyclone and come out with only \$300 damage.

H. F. A. Spilker, Eighteenth street and Choteau avenue, says \$350 will repair all damages to his establishment and buy a good cigar besides.

Otto Traubel, Jefferson street and Choteau avenue, figures out that he lost about \$200, but at his present rate of trade he will make it all back before the carpenters get through with their repair work.

Geo. G. Bird, Jefferson avenue and Anna street, is moving what is left of his stock down to 5600 Virginia avenue. One thousand dollars will not begin to replace his damages.

J. B. Koch, Jefferson and Shenandoah streets, says there is no use crying over spilled milk. His loss was about \$500, but he is making it back at a rapid rate. He don't care to see any more cyclones very soon.

Jacob Friez, Fourth and Convent streets, is \$300 worse off for the storm. His building is propped up on all sides and in the middle, but he is doing a lively prescription business.

The Souard Pharmacy, 1600 South Broadway, was damaged to the extent of \$100.

Chas. Bredemeyer, 3826 South Broadway, sustained a loss of about \$300. Mr. Bredemeyer and wife are in Europe, but their store is in the safe charge of A. T. Witmann, Ph.G.

G. H. J. Andreas, Mississippi and Park streets, says he does not know how he happened to get off so easy. Houses were knocked down all around him, while his total damage is scarcely \$100.

Philip Kaut, 1800 Lafayette avenue, says \$100 will replace all damages on his stand.

J. Weinsberg, Tenth street and Lafayette avenue, is surrounded by demolished houses and yet gets out with about \$500 damages.

The Iron Mountain Drug Store, 1401

South Broadway, was well protected, but sustained a loss of \$200 damages.

The Anthony Flats Pharmacy, Shenandoah street and Compton avenue, was very seriously damaged. One thousand dollars will scarcely replace the damaged stock.

The Compton Heights Pharmacy, Grand and Shenandoah streets, will be all right after \$200 has been expended in repairs.

L. Jost, 2981 Gravois avenue, was among the heavy losers. His stock was damaged at least \$800, while \$500 will not repair the fixtures. The store building was almost a total wreck.

Chas. F. Wilson, Eleventh and Rutger streets, escaped with but two broken plate glasses.

Dr. Alois Blank's drug store on South Broadway sustained considerable injuries. The doctor also lost heavily on other property.

Carey Bros.' Pharmacy, California and Cherokee streets, was damaged to the extent of \$200.

G. Gieren, Twelfth street and Choteau avenue, was in the path of the cyclone, but the damages were light.

Sennewald Bros., Eighth and Hickory streets, are \$500 the worse off for the cyclone.

## Annual Pharmaceutical Association Meetings

### The Texas Association.

THE annual meeting of the Texas Pharmaceutical Association took place in Dallas, May 18, 19 and 20. The opening session was called to order at 10.30 o'clock Monday morning by president H. L. Carleton. The association was welcomed to Dallas by the Mayor of the city, who told the members that the town was theirs and "if you don't see what you want," he added, "we will put on the Roentgen rays, bring it out and make it visible." Mr. Hickox responded to the Mayor's address in a felicitous speech, after which President Carleton delivered his annual address. Applications for membership were received from the following named Texas pharmacists, who were duly elected after the usual formalities:

#### New Members.

Austin: Arthur N. Griffith.  
Bovic: G. N. Foreman.  
Bridgeport: Henry F. Lackey.  
Brownwood: R. J. Bynum.  
Caddo Mills: Charles F. Stevenson.  
Dallas: E. J. Eberle, Eugene J. Jacobs, Felix Parsons, H. P. McKnight, John S. McCauley, W. H. Diamond, Fred. J. Wav, H. P. McKnight, W. O. Middleton, E. M. Tillman, J. Oswald Bradley.  
De Leon: S. E. Deely.  
Flotation: Frank J. Foltik.  
Galveston: J. Julius Schott, Richard H. Combs, George H. Leinbach, F. M. McGork.  
Georgetown: Perry Harris.  
Goldthwaite: Robert F. Logan.  
Gonzales: Frank Priestley, Louis C. Brenner.  
Groesbeck: J. F. Hopkins.  
Huddard City: Rich. H. Hamner.  
Houston: G. G. Dreier.  
Italy: J. B. Collins.  
Lancaster: C. M. Lyon, S. H. Strain.  
Marshall: Ed. S. Richardson.  
McKinney: G. G. Burnett, G. R. Wallace.  
Quilla: J. M. Harwell.  
Paris: W. C. Elliott.  
Plano: Harry B. Beaty.  
San Antonio: W. J. Parchman.  
Van Alstyne: Robert E. Dunning.  
Whitley: T. B. Tanner.  
Rochester, N. Y.: Charles C. Crates.

### A New Law For Texas.

A number of reports were then submitted by the chairman of standing committees, after which President Carleton read the report of the Committee on Legislation and the proposed pharmacy law the next Legislature will be asked to enact. It was the most important business before the association and is as follows:

#### PROPOSED PHARMACY LAW FOR TEXAS.

A bill to be entitled "An act to amend an act entitled, 'An act to regulate the practice of phar-

macy in the State of Texas and providing a penalty for the enforcement of the same,' approved April 6, 1889."

Section 1.—Be it enacted by the Legislature of the State of Texas that the above recited act be amended so as to read hereafter as follows:

#### REQUIREMENTS FOR PRACTICE.

Sec. 2.—That it shall be unlawful for any person not a registered pharmacist within the meaning of this act to open or conduct any pharmacy, dispensary, drug store, apothecary shop or store for the purpose of retailing, compounding or dispensing drugs, medicines or poisons, or for any person not a registered pharmacist or a registered assistant pharmacist to prepare physicians' prescriptions or to compound or vend medicines except under the direct supervision of a registered pharmacist or a registered assistant pharmacist. Any person violating the provisions of this section shall be liable to a fine of not less than \$25 nor more than \$100 for every such violation. Provided, however, that nothing in this act shall prevent any person or persons owning a drug store or pharmacy who shall employ and place in active personal charge of the same a registered pharmacist, and that nothing herein contained shall apply to or in any manner interfere with the practice of any physician who does not keep open shop for compounding, dispensing or selling medicine; nor with the exclusively wholesale business of any wholesale druggist; nor with the sale of patent and proprietary medicines and domestic remedies by retail dealers in locations as hereinafter provided.

#### SALES BY UNREGISTERED PERSONS.

Sec. 3.—That it shall be unlawful for the proprietor of any drug store or pharmacy to allow any person in his employ, except a registered pharmacist or registered assistant pharmacist, to compound, dispense, or sell at retail, drugs, medicines or poisons, except under the direct supervision of a registered pharmacist or a registered assistant pharmacist. Any person violating the provisions of this section shall be liable to a fine of not less than \$10 nor more than \$50 for every such offense.

Sec. 4.—The term drug store or pharmacy shall for all purposes of this act be construed to mean a store, shop or other place of business where drugs, medicines or poisons are compounded, dispensed or sold at retail.

#### MEANING OF THE TITLE "REGISTERED PHARMACIST."

Sec. 5.—Registered pharmacists must be persons not less than twenty-five years of age, who have had four years' practical experience in compounding drugs in drug stores where the prescriptions of medical practitioners are compounded, and have passed a satisfactory examination before the State Board of Pharmacy hereinafter mentioned. The said board may, in their discretion, grant certificates of registration to graduates in pharmacy presenting diplomas from regular incorporated colleges of pharmacy, and to such persons as shall furnish with their application satisfactory proof that they have been registered by examination in some other State; provided, that such other State shall require a degree of competency equal to that required of applicants in this State.

#### REGISTERED ASSISTANT PHARMACIST.

Sec. 6.—Registered assistant pharmacists must be persons not less than eighteen years of age

who have had three years' services under a registered pharmacist and have passed a satisfactory examination before the State Board of Pharmacy.

Sec. 7.—Every applicant for registration as a registered pharmacist or as a registered assistant pharmacist shall pay to the secretary of the Board of Pharmacy the sum of \$5; provided, that in case of failure of any applicant to pass a satisfactory examination, said applicant may at any other one meeting of the board within twelve months be examined without cost.

#### PERMITS.

Sec. 8.—The Board of Pharmacy may in their discretion issue permits to persons, firms or corporations engaged in business in localities where there is no drug store or pharmacy, empowering them to sell the usual domestic remedies and proprietary medicines under such restrictions as the board may deem proper. Each applicant for said permit shall pay to the secretary of the Board of Pharmacy the sum of \$2 before said permit shall issue. Said permit shall specifically state just what the holder thereof is allowed to sell.

#### ANNUAL RENEWAL OF LICENSES.

Sec. 9.—Every registered pharmacist who desires to continue the practice of his profession shall annually, on such dates as the Board of Pharmacy may determine, of which date thirty days' notice shall be given by said board, pay to the secretary of the board a registration fee to be fixed by the board, but which shall in no case exceed \$1, for which he shall receive a renewal of registration. Registered assistant pharmacists, upon receiving notice as aforesaid, shall, if they desire to renew their registration, pay to the secretary of the board an annual fee not to exceed 50 cents. Registered pharmacists and registered assistant pharmacists, retiring from the practice of their profession, shall not thereby be deprived of their right to renewal upon the payment of said fees, provided application for registration is made to the board within five years from date of such retirement; provided, however, that the Board of Pharmacy may refuse registration or renewal and may suspend the certificates of registered pharmacists or registered assistant pharmacists who are proven to be so addicted to the excessive use of stimulants or narcotics as to render them unsafe to handle or sell drugs, medicines and poisons.

Sec. 10.—All persons holding a certificate of registration under this act shall post it in a conspicuous place in the store or pharmacy which they are conducting, or in which they are employed. Failing to do this the Board of Pharmacy may cancel their registration and deprive them of their certificate.

#### DIVISION OF THE STATE.

Sec. 11.—For the purposes of this act the State shall be divided into four districts by division lines corresponding to the ninety-eighth degree of longitude west from Greenwich and the thirty-first degree of north latitude. The northwest, northeast, southwest and southeast sections of the State, so divided, shall be known respectively as the first, second, third and fourth pharmaceutical districts.

Sec. 12.—As soon as practicable after the passage of this act, and biennially thereafter, the Texas State Pharmaceutical Association shall recommend to the Governor not less than ten registered pharmacists, and from those recommended he shall appoint five who shall constitute the State Board of Pharmacy. The persons so appointed shall hold office for two years, and should a vacancy occur in the board from any cause the Governor shall appoint another from among those recommended to fill the unexpired term.

#### DUTIES OF THE BOARD.

Sec. 13.—The board shall, within thirty days after their appointment, meet and organize by electing a president and treasurer from among their members and a secretary who shall not be a member of said board. The board shall prescribe the duties and compensation of the treasurer and secretary and shall require each to give such bond as said board shall direct. It shall be the duty of said board to examine all applications for registration submitted in proper form; to grant certificates of registration to such persons as may be entitled to the same under the provisions of this act, and make an annual report to the Governor of all the proceedings of the board for the year and an account of all moneys received and disbursed by them pursuant to this act. The board shall hold meetings for the examination of applicants for registration, and the transaction of such other business as shall pertain to its duties, at least once in three months; provided, that said board shall hold meetings at least once in every year, in each pharmaceutical district, and it shall give at least thirty days' public notice of the time and place of such meeting. The board shall have the power to make by-laws for the proper fulfillment of its duties under this act and shall keep a book of registration in which shall be entered the names and post office addresses of all persons registered or holding per-

mits under this act, which book shall also specify such facts as said persons shall claim to justify their registration. Three members of said board shall constitute a quorum for the transaction of any and all business.

#### DUTIES OF THE SECRETARY.

Sec. 14.—The secretary of the board, in addition to his salary or other compensation, shall also receive his traveling and other expenses incurred in the performance of his official duties. The members of the board shall receive the sum of \$5 for each day actually engaged in this service and all legitimate and necessary expenses incurred in attending the meetings of said board. Said expenses shall be paid from the fees received by the board under the provisions of this act, and no part of the salaries or other expense of the board shall be paid out of the State Treasury. The secretary shall pay over to the treasurer of the board all moneys that shall come into his hands as secretary, and all moneys received in excess of said per diem allowance and other expenses above provided for shall be held by the treasurer as a special fund for meeting the expenses of said board; provided, that the Board of Pharmacy may each year make an appropriation from its surplus for the benefit of the Department of Pharmacy of the University of Texas, said appropriation to be expended in such manner and for said purposes as said board, with the approval of the dean of the faculty, may direct.

#### PENALTIES FOR PROCURING FALSE REGISTRATION.

Sec. 15.—Any person who shall procure, or attempt to procure, registration for himself or any other person under this act by willfully making or causing to be made any false representation shall, upon conviction, be fined not less than \$25 nor more than \$100 for each and every offense, and the name of the person so fraudulently registered shall be stricken from the register.

#### TEMPORARY CERTIFICATES.

Sec. 16.—The president of the Board of Pharmacy may direct the secretary to issue temporary certificates to applicants presenting satisfactory evidence of their qualification, but said temporary certificates shall be null and void after the first meeting of the board next after granting said temporary certificates; provided, further, that not more than one temporary certificate shall ever be granted to any one person. The fee for issuing a temporary certificate shall be \$1.

Sec. 17.—All persons registered in accordance with the act regulating the practice of pharmacy approved April 6, 1898, shall, upon presenting to the Board of Pharmacy satisfactory proof of such registration, be registered without examination upon the payment of the fee for renewals, as provided in section 9 of this act.

#### REGISTRATION OF PHARMACISTS IN BUSINESS.

Sec. 18.—Proprietors of drug stores or pharmacies in localities in the State of Texas which were exempt from the provisions of the former act regulating the practice of pharmacy, and who are actively engaged in the preparation of physicians' prescriptions and compounding and vending medicines at the passage of this act, shall be registered without examination upon the payment of the fee as prescribed in section 7; provided, that application for registration shall be made to the Board of Pharmacy within ninety days after the organization of said board.

Sec. 19.—All acts and parts of acts in conflict with this act are hereby repealed.

Discussion of the proposed pharmacy law was postponed to a later session.

The report of the Legislative Committee, of which John A. Campbell of Austin was chairman, was read. The report was brief and the committee found but little to do, owing to the fact that the Legislature has held no session since the appointment of the committee. On the subject of national legislation the committee requested members of Congress to support bills pending looking to an increase in the pay of the pharmacists in the service of the United States. The report was filed.

#### SYMPATHY FOR SHERMAN.

Mr. Guy Sumpter offered the following resolution:

Whereas, We learn with sorrow and regret that our neighboring city, Sherman, has but lately been visited by a most disastrous tornado, burying in their graves many yet in the prime of life and spreading destruction and desolation in its path; and

Whereas, At this moment we learn that many are distressed financially, bodily and mentally in that city; be it

Resolved, That we, the Pharmaceutical Association of Texas, in convention assembled, hereby extend to the city of Sherman our heartfelt sympathy, and pray that God, ever merciful, will give them the consolation and peace of mind that only He can give.

Mr. Wellington moved the adoption of the resolution and the appropriation of the sum of \$25 for the relief of the sufferers. Carried unanimously.

The committee to which had been referred the annual message of the president reported, recommending that it be received with the unanimous indorsement of the association and that a vote of thanks be accorded that official. The report was adopted.

C. A. Klauber of Dallas asked if a pharmacist who had been expelled from a local association retained his membership in the State association. "Yes," said the chair, "unless he has been guilty of a very reprehensible offense. Expulsion growing out of local causes will not forfeit a membership in a State association."

At 4.30 p.m. the convention adjourned until the following morning.

#### Second Day's Session.

The discussion of the pharmacy law was taken up at the session on Tuesday morning. A motion to adopt the law by sections was carried. The Committee on Legislation had drafted the bill with great care, and there were no arguments that approached the size of a contest. The first eight sections, with the exception of the second, were adopted before noon. A vote on the second article was postponed until the afternoon session. The convention then adjourned until 8 o'clock.

#### AFTERNOON SESSION.

The special Auditing Committee appointed at the morning session stated that they had examined the reports of the secretary and the treasurer and had found both well drawn up and entirely correct. The committee was discharged and the thanks of the association voted Secretary Walker and Treasurer Shook.

The pharmacy law was again taken up and section 2, the adoption of which had been postponed until afternoon, was read and passed. The remaining sections were then passed and the pharmacy bill, as printed above, was adopted.

On motion of E. J. Eberle a vote of thanks was extended the committee "for the most admirable pharmacist bill drafted and presented by them."

President Carleton announced that the Committee on Papers and Queries was not present, hence reading of reports would be deferred.

A motion to postpone annual election of officers until next day prevailed.

#### Third Session.

The third and final session of the seventeenth and what is said to be the most successful annual convention of the association opened Wednesday morning, at 10.30.

#### TO PREVENT THE SALE OF NARCOTICS TO HABITUAL USERS.

President Carleton called W. F. Shook of Dallas to the chair and called up the poison law the Committee on Legislation had drafted for enactment by the next Legislature. The law was referred without discussion to the Committee on Legislation. It is as follows:

*A bill to be entitled, An act to regulate the sale of cocaine, morphine or salts of either, or opium, or any preparation of opium containing ten per cent. or more of crude opium, and prescribing penalty therefor. In the house, Feb. 11, 1896, reported favorably.*

Section 1.—Be it enacted by the Legislature of the State of Texas: That it shall be unlawful for any person to sell, give away or furnish to any person any morphine, cocaine or salts of either morphine or cocaine, or opium, or any preparation of opium containing 10 per cent. or more, to any person known or reputed to be an habitual user of such drug.

Sec. 2.—Any person selling or dispensing any such drug as described in section 1 of this act shall keep a book for the purpose and shall record in said book the date of sale, the amount sold, and the name of the purchaser, signed in his or her own handwriting, and the purpose for which it is to be used.

Sec. 3.—It shall be unlawful for a purchaser of any drug described in section 1 of this act to sign a fictitious name to the record.

Sec. 4.—Every violation of this act shall constitute a misdemeanor, and upon conviction thereof by any court having competent jurisdiction the violator shall be fined in any sum not less than \$25 nor more than \$100.

Sec. 5.—Nothing in this act shall prevent the filling of a physician's prescription containing any of the drugs named in this act, nor shall it apply to wholesale dealers selling to the retail trade.

### Final Session.

#### ELECTION OF OFFICERS.

Immediately upon re-assembling in the afternoon the convention proceeded to elect officers for the ensuing year. Amid applause from every delegate in the room Guy Sumpter nominated President Carleton to be his own successor. The nomination was seconded by half a hundred at the same time, and the president was elected for the third term by acclamation. Other officers elected were: Vice presidents, Guy Sumpter, John A. Campbell and Mrs. Cunningham; secretary, R. H. Walker; treasurer, W. F. Shook.

#### GALVESTON NEXT YEAR.

An invitation from the Galveston Chamber of Commerce, per C. H. McMaster, secretary, inviting the pharmacists to hold their next annual meeting in that city, was read. The invitation was accepted without a dissenting vote. A delegate from Galveston invited his brother members to bring their wives to Galveston next year.

A banquet in the evening brought the proceedings of the convention to a close.

### The Arkansas Association.

The fourteenth annual meeting of the Arkansas Association of Pharmacists began in the Senate Chamber, at Little Rock, on May 12, with President A. L. Morgan of Camden in the chair, and Secretary J. F. Dowdy of Little Rock at the desk.

Sixteen applications for membership were filed, as follows:

F. G. Schrackter, Little Rock; Frank Brust, Russellville; Jas. A. Niell, Waldo; Arthur H. Hamilton, Augusta; David C. Webb, Forrest City; S. R. Crawford, Benton; Jas. P. Potter, Greenway; Chas. A. Cravens, Siloam Springs; J. Edgar Wilson, Walnut Ridge; A. C. Read, Little Rock; L. C. Swicegood, Center Point; Latta K. Snodgrass, Little Rock; F. O. Robinson, Searcy; John W. Irwin, Heber; S. H. Stith, Van Buren.

The morning session was occupied principally by the reports of committees and miscellaneous business.

At the afternoon session the annual reports of the secretary and treasurer were submitted. Secretary Dowdy reported the present membership of the association to be 150, an increase of six since the last meeting.

Treasurer J. A. Jungkind of Little Rock reported \$249.01 balance in his hands.

When the reports of special committees

were called for, W. W. Kerr of Russellville submitted a draft of the revised constitution and by-laws. One of the new provisions is that any member may be suspended or expelled for improper conduct by a vote of two-thirds of the members present at any annual meeting upon written charges and specifications preferred, a copy of which shall be served by the secretary upon the accused, citing him to appear at the next annual meeting and answer the same.

The report submitted by Mr. Kerr was referred to a committee.

At night the delegates were tendered a complimentary entertainment at Greenwood Park, by the local pharmacists.

The officers elected were as follows: President, J. M. Sparks, Fort Smith; first vice-president, F. G. Kerr, Van Buren; second vice-president, J. B. Airhart, Lonoke; secretary, J. B. Bond, Jr., Little Rock; treasurer, Jno. A. Jungkind, Little Rock.

The next meeting will be held in Little Rock on the second Tuesday in May.

### Indiana Association.

The fifteenth annual meeting of the Indiana Pharmaceutical Association opened at 10 o'clock on Tuesday, June 2, in the Hall of Representatives in the State Capitol, at Indianapolis, with President Moffett in the chair and about 80 members present.

Governor Matthews bade the members welcome. He said that the pharmacists deserved all encouragement and that the State of Indiana should do more for them. "I hope that you yourselves will be able to agree upon some measure that will commend itself to the next Legislature, and which will result in a pharmacy law that will be of advantage to yourselves and to the people of the State," he said.

The Governor left the hall as soon as he finished. August Detzer of the Indianapolis Drug Company responded.

Short addresses were made by J. M. Good of St. Louis, president of the American Pharmaceutical Association, and by C. N. Hallberg of Chicago, president of the Illinois Pharmaceutical Association.

President T. J. Moffett, in his address, did not review the work of the association for the past year. He spoke of the weakness of the association, and said that if all of the pharmacists were members who should be the association would be strong enough to accomplish almost anything. Although there was much talk of the degeneration of pharmacy, he did not think there was anything in it. He thought that while there was not so much money in the drug business as there used to be, it was due in large part to the advent of the physicians' supply man. An effort should be made to strengthen the association, and then it might be possible to get an adequate pharmacy law passed by the Legislature. He also thought that the members of the association should work together against the physicians' supply man and against the selling of drugs at cut prices.

Reports were read by committees, as follows: Executive, Education, Legislative, Insurance, Trade Interests, Pharmacy and Queries and Delegates to American Pharmaceutical Association.

#### AT THE AFTERNOON SESSION.

R. I. Eads of Indianapolis, chairman of the Legislative Committee, read a report

favoring a pharmacy bill drafted by the committee to be presented to the next Legislature. The bill was read and various improvements or modifications were suggested by members. It provides for the nomination by the Indiana Pharmaceutical Association of ten practicing pharmacists of ten years' experience, from whom the Governor shall appoint five who are to constitute a State Board of Pharmacy. This board shall meet four times a year in different cities of the State to examine applicants for a pharmacist's license. The secretary of the board shall receive a salary and shall be empowered to hold additional examinations, not exceeding four during the year. The bill provides that 120 days after the passage of the bill no drug store shall be kept except by a registered pharmacist, and no prescriptions shall be compounded except by the proprietor or by an assistant who is a registered pharmacist. Violation of the law is to be considered as a misdemeanor, the penalty being a fine of from \$10 to \$100. Applicants for pharmacy license must be over 18 years old, must pass a satisfactory examination before the board and must have served not less than two years in a store or pharmacy where physicians' prescriptions are compounded. The bill also provides that the board may at its discretion recognize certificates or licenses issued by boards of pharmacy in other States or may grant certificates to those holding diplomas from reputable colleges of pharmacy.

The Legislative Committee was instructed to do what it could toward getting this bill enacted into law.

#### THE EVENING SESSION.

The evening meeting of the association was held at the German House, on Massachusetts avenue. In addition to the visitors the local druggists with their wives were present. After an exhibition drill in the gymnasium by the ladies of the classes, Prof. J. M. Good of St. Louis, president of the American Pharmaceutical Association, delivered an address, his topic being the educational phase of the business, with its bearings upon the commercial side of the druggist's life.

#### The Second Day.

At the second day's session the following officers were elected: President, Otto Gross, Ft. Wayne; first vice-president, Bruno Knoefel, New Albany; second vice-president, John Kennedy, Vincennes; third vice-president, Thomas Thornberg, Indianapolis; secretary, Arthur Timberlake, Indianapolis; treasurer, Grant Allen, Indianapolis. Executive Committee: F. H. Burton, Evansville; Charles Eichrodt, Indianapolis, and S. Muhl, Indianapolis.

The committee appointed to consider the claims of the U. S. Pharmaceutical Company reported against giving the endorsement of the I. P. A. to that company.

The Committee on President's Address commended the suggestion as to increased membership for the organization, and approved of the appointment of a State organizer.

The Committee on Membership reported that 46 had applied for membership, over twice as many as last year. The 46 applicants were elected.

The association then adjourned, to meet next year at Indianapolis, the remainder of the day being devoted to recreation.



## IN GREATER NEW YORK

New York, Brooklyn, Jersey City and Vicinity.

George S. Davis of Parke, Davis & Co. was in town last week.

Otis Brothers of Binghamton, N. Y., have been sold out to C. B. Waterman & Co.

L. A. Spaeth has given up his position as apothecary at the State Hospital, Ward's Island.

Prof. Jos. P. Remington of Philadelphia paid one of his brief visits to New York week before last.

T. B. Dunn of T. B. Dunn & Co., Rochester, N. Y., proprietors of Sen Sen, was seen among the trade last week.

Eugene Grosvenor of J. M. Grosvenor & Co., Boston, transacted some business in New York on his visit last week.

John Watson Cox of the Antikamnia Company sailed by the "Majestic" on Wednesday last for his annual European outing.

F. T. Bongartz, proprietor of the well-known pharmacy at Fifty-eighth street and Ninth avenue, is making preparations for a trip to Europe.

A. L. Hatch, representing Fox, Fultz & Co., left New York June 8 on his regular midsummer trip, calling on the trade in Maryland and West Virginia.

Bigelow Haley and S. V. Richards of Boston were in the city last week buying a new stock for Chas. E. Haley & Co., a large druggists' sundries house in Boston.

Karl M. Vogel, one of the recent graduates of the New York College of Pharmacy, has taken a position with J. Horton Uhle, corner of Amsterdam avenue and 144th street.

Arverne, L. I., a pretty watering place, near Far Rockaway, is to have a drug store all to itself this season. Lindsay & Co. of Eighty-sixth street and Columbus avenue, this city, will conduct it.

Walter S. Rockey, now of 501 Eighth avenue, has purchased the pharmacy formerly owned by W. F. Miller, Jr., on Amsterdam avenue, between 153d and 154th streets. Mr. Fuller is in charge.

G. W. Bechtold, formerly the proprietor of paying pharmacies at Ninety-fifth street and Third avenue, this city, and Astoria, L. I., is opening a well appointed pharmacy at 2002 Second avenue.

Frank Lawrence and Henry Seagrist of the Rio Chemical Company of St. Louis sailed for Europe last Wednesday on the "Majestic" for a brief sojourn abroad, accompanied by the wife of Mr. Seagrist.

Samuel Nauheim, who has been assisting his brother for some time past in the store at Lexington avenue and Fifty-ninth street, has been obliged to take a protracted vacation on account of ill health.

D. M. Newbro of Butte, Mont., was among recent visitors to New York City. Dr. Newbro is president of the Montana State Board of Pharmacy, and is the leading pharmacist of the great Northwest.

The pharmacy formerly owned by Dr. Ferd. King, at 135th street and Eighth avenue, has been purchased by Getty & James. F. K. James is the proprietor of a paying pharmacy on Eighth avenue, corner of Forty-fourth street.

W. S. Boyden, New York representative for Herf & Frerichs of St. Louis, is rapidly recovering from some rather serious bruises which he received recently from being thrown out of a buggy while out driving.

The discontinuance is announced of the *Drug Reporter*, started at Danbury under the editorship of James L. Jordan a few months ago. The *Buffalo Druggist*, published at Buffalo, N. Y., has also been discontinued.

C. F. Harder has resold his store at 65 Avenue A, to R. B. Robins, who lately conducted a pharmacy at 19 Ludlow street. The store was sold in the first instance to Max Eckert, who committed suicide some time ago.

East Side druggists who have missed the genial countenance of J. Alex Whitet, who calls on the trade in the interest of Fox, Fultz & Co., this city, will be pleased to learn that he is enjoying himself in the company of his newly wedded wife at Old Point Comfort.

The Pacific Coast Borax Company, heretofore represented in this city by F. M. Smith as sole agent, will hereafter be represented by J. W. Mather as general manager. Mr. Mather has for seven years and a half been conducting the business under Mr. Smith's directions and is thoroughly conversant with all its aspects.

George J. Seabury, president of the New York State Pharmaceutical Association, is spending a few days at Lake Hopatcong, N. J., where he is well known as a successful fisherman. His address to the association this year will deal with many matters of trade interest, including recent legislation pertaining to pharmacy, and much interest is being taken in consequence.

Dr. J. Taylor Grant, a well-known Scotch chemist, who has recently been appointed medical officer of health at the treaty port of Shanghai, passed through New York last week on his way to China. Dr. Grant served a four years' apprenticeship as a pharmacist in the famous establishment of J. F. Macfarlan & Co., North Bridge, Edinburgh. He was appointed to his present position by the British Government after a competitive examination in which he stood highest.

The June meeting of the New York Section of the American Chemical Society was held on Friday evening, the 5th inst., at the College of the City of New York, Prof. A. A. Breneman presiding. Dr. C. A. Doremus read a "Note on Presence of Oil in Boiler Scale." J. A. Matthews described a "New Method of Preparing Phthalimid." The chair announced this as the last meeting of the season, and stated that the fall and winter meetings would probably be held in the same rooms.

The recent assignment of the wholesale drug firm of Singer & Wheeler, Peoria, Ill., will be recalled by many of our readers. In connection with the application for a receiver the court has ordered the stock and merchandise to be offered in ten lots according to the kind of goods, and also as a whole. The bids will be

opened on July 1, and printed inventories will be sent to all the leading jobbers and retailers. It is thought by some of the leading creditors that this plan will realize very much more to the creditors than was at first anticipated.

A very pretty wedding was celebrated at Manchester-by-the-Sea, Mass., a few weeks ago, the contracting parties being F. L. Upjohn of the Upjohn Pill & Granule Company, this city, and Miss Lelia Shelby of Denver, Col. Mr. Upjohn is receiving the congratulations of his friends on this happy conclusion to a romantic incident of the Denver meeting of the National Wholesale Druggists' Association last year, when he first met the lady who is now Mrs. Upjohn. The marriage took place at the summer cottage of the bride's aunt, Mrs. Judge Rucker of Denver.

The annual "outing" of the Alumni Association of the New York College of Pharmacy is announced to take place at Point View Island, near College Point, on Wednesday, June 17. Arrangements have been made with the street railroad company to run through cars to College Point, leaving Long Island City (via Thirty-fourth Street Ferry), at 1.45 p.m. sharp. The afternoon will be devoted to a baseball game challenge, Alumni Association vs. Class '08, N. Y. C. P., football, shooting match, gymkhana games, bowling tournament and dancing. Tickets and additional information concerning the outing can be had from Thos. M. Davies, 548 Third avenue, New York.

The many friends of B. Van Buren, formerly of New York and now of Chicago, will be glad to learn of his success in that city. Mr. Van Buren conducted a pharmacy for many years on Sixth avenue, near Twenty-eighth street. He moved to Chicago about 20 years ago and established a pharmacy at 1249 West Madison street, and after conducting it successfully for a period of ten years, sold it to H. B. Brown. The latter died about three months ago and Mr. Van Buren repurchased the store, refitting it with new shelf bottles, tile floor, cashier's desk, telephone room and many other improvements, making it one of the handsomest drug stores on the west side.

## THE VANILLINE SUITS.

Dodge & Olcott have issued the following announcement: "Notice is hereby given to the consumers of this article and to all others interested that DeLaire & Co., whose sole agents we are in America, have begun suit against the Elizabeth Chemical Company for infringement of the patents under which the only genuine Vanilline is manufactured, and we are informed that similar action will be taken by DeLaire & Co. against all infringing manufacturers, as well as all other violators of the patent rights of DeLaire & Co., whether such violation be by means of sale, distribution or consumption of the infringing article."

Examination of the witnesses began on June 1 and M. B. Manwaring, a chemist and an officer of the company, testified that the product of the Elizabeth Chemical Company was marketed by the Franco-American Trading Company of New York, which is an interesting fact, in view of the above statement by Dodge & Olcott. The suit is brought by Pollok & Mauro of Washington, as attorneys for DeLaire & Co. M. Stein is president of the company sued.



### The Drug Trade Club.

The following are the acquisitions to the membership of the Drug Trade Club announced at the last meeting of the Board of Governors:

E. H. Moore, Benj. Blossom, Dodge & Olcott.  
S. H. Carragan, Parke, Davis & Co.  
J. MacDonald, Jr., Newark, N. J.  
Robt. Brookhouse, Jr., Providence,  
R. L. agent for Read Holliday's Sons Company, Limited.  
John T. Barry.  
Chas. Serra.  
Allen H. Still.  
W. W. White, Roessler & Haselacher Chemical Company.  
W. H. Andrews, Pratt & Lambert.  
F. G. Meyer, Meyer Bros. Drug Company.  
Chas. Kilgore.  
A. H. Schuyler, Johnson & Johnson.  
Geo. MacLagan, Schoellkopf, Hartford & MacLagan, Limited.  
Hugo C. Schultz, Brooklyn.  
Joseph A. Toy, Brent Good & Co.  
G. W. Hopping, Seabury & Johnson.  
C. F. Loutrel.  
Geo. B. Steele.  
William O. Allison, *Oil, Paint and Drug Reporter*.

Besides these there are some dozen or more applications now awaiting the action of the board.

This evening (June 10) a subscription dinner will be given to celebrate the opening of the new quarters in John street, which are proving much more popular with the members than were the quarters on Cedar street.

### The Proposed Chemical Club.

A meeting of the Committee on Organization of the proposed chemical club, reference to which has already been made in these columns in connection with our reports of the meetings of the American Chemical Society, was held on Wednesday, May 27, in the rooms of the New York Board of Trade and Transportation.

Dr. A. A. Breneman, chairman of the committee, presided. He briefly explained the objects of the proposed club. Its purpose was to get together in a social organization all who are interested in chemical pursuits. "What we want," said he, "is a social club for the cultivation of friendliness between chemists. We all know how difficult it is to combine social with professional matters. The relations between the manufacturing chemist, the professional chemist and the analytical chemist are kept too wide apart, and a social organization of the kind now proposed would be of great interest and benefit to all who are interested in the science of chemistry or its applications."

The chairman invited discussion. T. J. Keenan of the AMERICAN DRUGGIST expressed himself in favor of the proposed club and touched on the many advantages which would accrue to its members. Chemists in different lines of work would be brought closer together and profit by mere interchange of views, which would naturally follow.

A. H. Mason said he understood that there was not a truly chemical club in existence anywhere and he considered the present movement a sensible and timely one.

P. S. Tilden of the Franklin H. Kalbfleisch Company spoke for the manufac-

turing chemists. He asked if any steps had been taken to enlist the support of the leading chemical firms and he referred to advantages which would follow from securing their co-operation.

C. W. Parsons of the *Pharmaceutical Era* said he was heartily in favor of the proposed club. He referred to the inconveniences resulting from a lack of some central meeting place where chemists could come together in social intercourse.

Before adjourning Chairman Breneman announced that a prospectus of the proposed club would be sent out to all interested in a few days. A card will accompany the prospectus, which intending members would be asked to sign. No member will be held responsible for any amount in excess of his subscription, and this limited liability would be guaranteed by the founder of the club.

Among those present at the meeting were A. P. Hallock, H. Schweitzer, G. W. Gesner, G. N. Williamson, A. H. Mason, T. J. Keenan, P. S. Tilden, C. W. Parsons, William E. N. McMurtie and H. Weeks.

### Prospectus of the Club.

Since the above was written we have been favored with a copy of the prospectus which is being sent out to persons who are likely to become members. It reads as follows:

#### PROSPECTUS OF THE NEW YORK CHEMICAL CLUB.

During the last two or three years the formation of a chemical club has been frequently talked about. So excellent did the field appear for a social organization which would include the members of the various branches of the science and applications of chemistry, as well as manufacturers and others who are interested in chemistry, and those who might take pleasure in meeting chemists and their friends, that a number of chemists began to consider seriously whether such a club might be started. On all sides there is a growing enthusiasm about the opportunities and the future of a chemical club which shall represent, combine and develop the interests mentioned.

It is believed that such a club will have a powerful and most beneficial influence in organizing the chemical profession and giving it a better representation, as well as in bringing together chemists and manufacturers, while those who may be socially interested in such a movement will find it one of the most unique and pleasant clubs in New York. It is the intention to start the club in a conservative and economical way which, while it shall keep well within the pecuniary limit assigned for it for the first year, shall not in any way hamper its fullest development in the future. The object is to make this a club distinctly characteristic of chemistry and chemical interests; not merely another purely social club to compete with those already established. The club will be the meeting place for chemical societies, and the distinctive home of all chemical interests. That there is no such organization and no provision for it, so far, will be readily seen. It is not merely a trade club nor a strictly scientific club that is proposed, but one which shall serve both the educational and the practical interests to which chemistry is related. It is confidently believed that aside from a more intimate acquaintance between chemists, manufacturers and business men, a membership in this club will be of practical value on account of the acquaintances that may be made, the ideas exchanged and the scientific information acquired. A valuable library will in time be built up, an interesting collection of chemicals, apparatus and technical products will be accumulated. These as well as other characteristic features of the club will make membership in it both pleasant and valuable.

The expenses of the club will be \$50 for the first year, \$25 annual dues and \$25 initiation fee, and the dues thereafter will be \$25 per annum.

A list of the members of the Committee on Organization follows, and eligible persons are asked to send their names to the chairman, A. A. Breneman, analytical chemist, 97 Water street, New York City.

## CONNECTICUT.

F. Phillips has entered the employment of Druggist Storer of Dixwell avenue, New Haven.

Adolph Wolf, the popular salesman with C. E. Whittesley of New Haven, has recovered from his late illness.

Druggist Duggan of Norwich has improved his store by having a handsome steel ceiling put in by a local concern.

George N. Alling, after a stay of 30 years at the corner of Grand and State streets, New Haven, has moved into new quarters at 95 Broadway, in the same city.

At the meeting of the Board of Pharmacy at Hartford, June 2, S. W. Smith of Ansonia was elected president and Henry M. Bishop of New Haven secretary.

Druggist C. M. Rogers of New London, recently appeared on a tandem advertising his business. As the idea was comparatively new, the outfit attracted considerable attention.

G. K. Foster, the head clerk in Hewitt's store on Chapel street, New Haven, while riding on his wheel met with an accident recently which gave him a shaking up, and nearly demolished the bicycle.

William C. Baur has purchased the drug business in Norwalk, erstwhile conducted by W. A. Vogel. Mr. Baur comes from New York, where he was employed by C. O. Bigelow at 102 Sixth avenue.

At a recent meeting of the Board of Pharmacy at Hartford the following candidates were successful in their examinations: John P. Crowley, New Haven; John H. Hartwell, Willimantic, and Le Roi C. Potter, Meriden.

A tasty drug store has been opened at 699 Main street, Hartford, by Hawley & Pomeroy. The new concern had their formal opening last week, and gave away souvenirs to the many friends who called. Mr. Hawley was formerly with the Park Drug Company for a period extending over nine years.

Prosecution Agent Dewell of New Haven is getting after the druggists in the Elm City. Thus far, however, only one druggist has been arrested for violation of the Sunday liquor law. He is William J. Brill, 2320 State street. Druggist Brill intends to fight the case and has refused to say anything about his arrest.

John W. Collins, a prominent druggist of Stratford, was recently found dead in his room by his housekeeper. His death was a shock to the community as he was a well-known and popular resident there. Mr. Collins has been in the drug business for some years. He was born in New Haven, where he has two brothers. The deceased was a member of the Masonic order and also a Knight Templar.

E. T. Vance of Ansonia has one of the handsomest drug stores in the State of Connecticut. It is only a couple of weeks ago that he opened his new establishment. Many original ideas have been carried out in the furnishings of the pharmacy. The fixtures were made to order by Fischer Brothers of New York, and are very creditable to them. The fountain is from the Low Art Tile Company, and is patterned after the design that took first prize at the World's Fair in Chicago.

## MASSACHUSETTS.

## POLICE DO NOT LIKE THE DOCTOR.

BOSTON, June 4.—A hearing was given Israel B. Kronberger, proprietor of the drug store, numbered 996 and 998 Washington street, by the Board of Police, recently on his petition for a Sixth class license, and after the hearing the matter was taken under advisement. If the police can prevent the doctor getting the license, they will do so, in order to get square with him for the joke he played on two of them last winter. He filled two bottles of ammonia, labeled them whiskey, and when the "smelling committee" of the liquor squad came around and sniffed they were very much startled and nearly suffocated.

According to the police, the drug store kept by Mr. Kronberger is a place to be shunned. Persons of crooked reputations have been seen "coming out of the store," and presumably have bought liquor; though the police could not swear to that. They had "seen women of ill-repute in the store," and, of course, they had bought liquor there; but when the evidence was all in, it was learned that none of the officers had ever seen any sold, except in one instance, when an officer bought some whiskey, during the absence of the proprietor, the clerk having been informed that the necessary permission had been obtained by the buyer. Mr. Kronberger had previously instructed his employees to sell liquor to no person.

Dr. Kronberger is one of the leading druggists of the city, and is an M.D., as well as a Ph.G.

On May 26 to 28, inclusive, the Massachusetts Board of Registration in Pharmacy held sessions and examined 40 applicants. The following met the requirements and received certificates as pharmacists: Patrick A. Cunningham of South Framingham; George B. Stackpole of Cambridge; Richard D. Schmidt, Willis G. Guild and Albert D. Lockhart of Boston. The other 35 will try again.

## VETERAN DRUGGIST DEAD.

Elias Crafts, one of the veteran druggists of Boston, died last week at his home in Charlestown, aged 99 years. He had been practically helpless for some time, but his mind was wonderfully preserved. Mr. Crafts was well known to the physicians and druggists of Boston of a half century ago. He was born in Newton. He learned the drug business in the store of Samuel Kidder & Son on Main street, and succeeded so well that in 1828 he opened a store of his own. "Crafts' Corner" was known all over the city. It was a rendezvous for the prominent people of the day, and the news of the hour was daily exchanged. In 1857 he sold out to Charles H. Chase, and afterward engaged in the wholesale drug business on Commercial Wharf, Boston. He accumulated a fortune and then retired.

He was a man of estimable qualities of heart, and was highly respected by all. He was of a most benevolent disposition and his private charities, unostentatiously bestowed, were numbered by the hundreds. He leaves four children. For nearly 40 years Mr. Crafts was a member of the Washington Fire Engine Company, and was afterward a member of the Old Veteran Firemen's Association.

## AFRAID OF THE BOARD OF PHARMACY.

In the case of Eugene Levitan, a Somerville druggist, who had been found guilty of illegal liquor selling, a fine of \$50 was imposed. In the course of the trial Robert R. Perry, who conducted the case for the Government, criticised Associate Justice Farrell for asking that no fine be imposed upon the defendant as it would injure his chances of securing a certificate from the Board of Registration in Pharmacy. Mr. Perry said such a request was an insult to the court.

## BLUE LAWS IN LYNN.

On Sundays nearly all places of business in Lynn are closed, in accordance with the demand of the Good Citizenship League. But in the matter of the drug stores the authorities will not attempt to close them, or prohibit the sale of soda or tobacco. The league may, however, bring the violators into court later, as they have been getting evidence against a number.

## NO MALT EXTRACTS IN QUINCY.

As announced in the AMERICAN DRUGGIST last month Henry H. Faxon of Quincy addressed an open letter to the chief of police of that city, relative to the sales of malt extracts by grocers and druggists, which sales were claimed by Mr. Faxon to be a direct violation of the liquor laws. These extracts, according to Mr. Faxon's analyses, contained from 8 to 10 per cent. alcohol. Mayor Adams made an investigation which satisfied him that Mr. Faxon's charges had good foundation, and he instructed his chief to notify all dealers that they must cease selling the prescribed extracts. They agreed to do so, and henceforth persons desiring malt extracts must order them from Boston.

## CHARLES G. HALEY DEAD.

Charles G. Haley, who died in Boston, May 19, was the head of the old druggists' sundries house of Charles E. Haley & Co., 71 Franklin street, Boston. He succeeded his father, who died in 1889, in the management of the business. They did a very large and extended business, representing a number of European manufacturers, and selling to the wholesale and retail drug trade throughout the New England States and a large portion of the South and West. Mr. Haley was an exceedingly lovable man. He numbered among his friends all of the wholesale trade in New England and in New York State, being exceedingly popular. He was a clubman, member of one of the leading military companies of Boston, and he died at the age of 29.

## Of Interest to the Trade.

The following named druggists in Framingham have been granted licenses of the sixth class: Frederick B. Horne, Frank W. Goodwin, Henry J. Carpenter, George Rice, F. A. Bean, C. L. Curtis and I. A. Lombard.

James F. Aiken, a druggist of Millbury, was swindled out of about \$85 by the representations of one M. L. Brown of Bromfield street, Boston, recently. Brown claimed to have a patent on several novelties, and that he had orders on the goods from local stores. Aiken was induced to take stock, and when he found out the state of affairs, he caused the dealer's arrest. Brown has not been sentenced yet.

## PENNSYLVANIA.

PHILADELPHIA, June 4.—Business in this city is very dull and most of the druggists complain of their inability to make collections. At this time of the year there is generally more or less of a boom in the drug trade, but for some reason or other the out of town druggists are purchasing very little and the city dealers are only securing what they must have. Notwithstanding the dullness, some of the druggists are contemplating improvements, among which E. Jounzman intends to refit his store at Fourth and Noble streets. Mr. Jounzman has two other stores in the city, and as he is very popular he is doing a good business.

## News Notes.

S. T. Hamburg, the well known druggist at Ninth and Somerset streets, has been compelled to give up business for the time being, owing to ill health.

On June 16, 17 and 18 the annual meeting of the Pennsylvania Pharmaceutical Association will be held at Mt. Holly Springs, and on the 19th the members will go to Gettysburg to view this historic place.

Schandein & Lind, the well-known manufacturers of Garwood's perfumes, are very busy, considering the stagnation of trade. Orders for their new odors are rapidly coming in, and they are keeping their force on full time to supply the orders.

J. Frank Kilgus, Smith, Kline & French Company's representative for the northwestern section of Pennsylvania, with headquarters at Williamsport, has been confined to his home for several days with pneumonia. He is better now and expects to be out shortly.

M. N. Kline does not care to talk in regard to the suit which was brought recently by the Park firm against the N. W. D. A., as the legal answer is now being prepared. This reply was to have been filed on May 29, but owing to neither side being ready it was postponed until June 19.

During June, July and August the wholesale drug houses in this city will close their places of business at one o'clock. Many of the employees of the various houses have organized themselves into baseball clubs, and there is some talk of having a series of games played between the various houses.

Professor Sadtler of the Philadelphia College of Pharmacy has just returned from a trip to the lead and zinc mines in Missouri. The professor was on the first train that arrived in St. Louis after the terrible cyclone, reaching East St. Louis one hour after the tornado.

On June 2 the last meeting of the season of the Board of Trustees of the Philadelphia College of Pharmacy was held, at which it was agreed to offer the use of the college building to the N. W. D. A. for its annual meeting. The principal business done was the increase of the insurance.

Theodore Maris left on June 3 for several weeks' trip through Europe. Mr. Maris will purchase a number of novelties in Vienna and other European cities. The innovation by this firm of keeping on hand a large supply of Bohemia glassware is to be continued, and while away Mr. Maris will lay in a new and larger stock. He will also secure other goods for which this house is noted.

## OHIO.

## Cincinnati.

## WAS THIS A POLITICAL ATTACK.

CINCINNATI, June 4.—A local paper recently printed nearly an entire page about the goods manufactured by the Perfect Preserving Company of Bellaire, Ohio. This is the company in which the Hon. J. E. Blackburn, the Republican nominee for State Dairy and Food Commissioner, is interested. Among other things the article referred to says: "Mother's Make of Catsup" is the alluring brand on a tomato sauce manufactured in Bellaire. The parties who own the catsup factory are known to the trade as the Perfect Preserving Company. The manager of the company has been J. E. Blackburn, who is now the Republican nominee for State Dairy and Food Commissioner, an office whose duty it is to protect consumers against adulteration and frauds of which makers and dealers may be found guilty. If Blackburn is elected it will be his sworn duty to detect and expose every adulteration in food products. Yet the Mother's Make of Catsup, which Mr. Blackburn's company has been making, is said to be preserved with salicylic acid—a drug which has been carefully examined in Germany and France, and the use of which has been positively forbidden in those countries. The employment of salicylic acid in food products to prevent fermentation is contrary to the laws of Ohio as they are at present. The provocation for the publication referred to at this time cannot be understood. It may be done for political capital, and this claim will doubtless be set up by Mr. Blackburn's friends. At any rate, Mr. Blackburn claims to have severed his connection with the Perfect Preserving Company, and if that be true the article in question is not pertinent in the manner in which it is used.

## Little News Items.

Mr. and Mrs. George Kylius will celebrate their tenth wedding anniversary next Monday night.

Albert Bingel, the well-known pharmacist at Sycamore and Liberty streets, has gone to Europe for the summer.

Stuntebeck Bros. have opened a new drug store at Eighth and Greenup streets, in Covington, Ky. It is a dandy.

W. T. Dawes has bought out the John C. Francis drug store at Fourth and Sycamore streets. Mr. Francis goes into the insurance business.

Dr. S. B. Marvin has opened a new drug store at the corner of Pearl and Butler streets. He also has a store at Elm and Front streets.

Dr. John F. Haynes, the hustling drug salesman who has been with Lehn & Fink for two years past, was here last week. He goes with Schieffelin & Co. soon.

C. Freericks & Co. have opened a neat drug store near the race track at Oakley. Mr. Eichler, who recently sold his store in Walnut Hills, will have charge of the new place.

William Mecum, a well-known young pharmacist, has bought the Hausman store at Carthage, Ohio. The store is to be remodeled and renovated. Young Mecum is the son of the well-known physician of that name.

## Cleveland.

CLEVELAND, OHIO, June 8.—The drug trade in this section of Ohio continues to be very quiet; indeed many druggists claim that it is slower now than it has been at any other time this year. They account for the inactivity on the part of sales by pointing at the condition of the weather, which has been rather cold for the past four weeks.

The soda water trade is in the same rut, and retailers are very disconsolate over the prospects for a good season; but a rise in the thermometer would work a wonderful change and create a demand.

The McCuen pharmacy of Massillon was greatly damaged by fire on May 28 during a heavy thunder storm. The fire started in the rear of the store and, the firemen think, was caused by lightning. The stock was damaged to the extent of \$1000, covered by insurance.

## THE CLEVELAND CHEMICAL CLUB.

The annual meeting and banquet of the Cleveland Chemical Club, which is the largest purely local club of its kind in the United States, was held on May 25 at the Forest City House. The following are the officers elected: President, Prof. Charles F. Maybery; vice-president, Prof. A. W. Smith; secretary, H. L. Paine; chairman of Programme Committee, Prof. A. W. Smith; chairman of Committee on Literature, Dr. A. W. Burrow. A resolution introduced by Dr. John G. Spenser of the Wooster Medical College appropriating \$50 annually to be spent for publications, this sum to be duplicated by the Case School of Applied Science for the same purpose, was adopted on the condition that if the Chemical Club at any time should determine to change their quarters their pamphlets and journals should go with them.

A paper on "Experiments for the Prevention of the Smoke Nuisance" was discussed theoretically by Charles A. Diehl and Phelix Geunther, and practically by William Oehlstrom. The discussion was then taken up by Prof. Charles Maybery, A. W. Burwell, H. L. Paine, Otto Leihme, D. B. Cleveland, A. L. Stark and Dr. John G. Spenser. The discussion developed the effect of smoke on health and the methods of detection of carbon monoxid and hygienic investigations. The next meeting will be held on the last Monday evening in October.

## CLEVELAND ACADEMY OF SCIENCES.

Cleveland scientists are interested in the formation of a federation of the city's scientific bodies which has been undertaken, and bids fair to be consummated at an early date in this city. Among the societies interested are the Chemical Society, the Electric Club, the Cleveland and Cuyahoga Medical Societies and the Hahnemann Society. The plan is to form a strong organization with central headquarters, and to further in every possible way the scientific interests and development of the city. Two meetings have been held and committees have been appointed to carry on the work of organization along different lines.

The project has not come to a head as yet, but its projectors claim that they will have an academy of science even if they have to resign from their present clubs and organizations and organize an academy of science from picked material. The present plan is to amalgamate all the science and chemical clubs in the city, erect a building that will accommodate such an organization, found

a library, and have a place which will be a scientific and chemical bohemia, and where the members can obtain lunch, entertain their friends and do most anything that fancy dictates. There is some State technicality which prohibits the amalgamation. Legal talent has been secured, and if this is the case an effort will be made to have a law passed eliminating any such objection. One feature of the project would be that each one of the 12 Cleveland societies which would make up the academy would have an individual library which every other member of the academy would have access to. In one sense it would make 12 individual libraries, but in another it would be only one mammoth library.

## THE PASKOLA DAMAGE SUIT.

The fact that A. J. White, the well-known patent medicine manufacturer of New York City, has brought suit, or would bring suit, against the individual members of the Ohio Pure Food and Drug Commission to the sum of \$200,000 has been confirmed by ex-State Secretary Ryan, who will perhaps be in charge of the action. He says the suit will be brought in Franklin County.

C. L. Osborne has purchased the store of George J. Schade, Sandusky, Ohio.

## MICHIGAN.

John E. Linehan has succeeded the firm of Moorehouse & Linehan, at Battle Creek, Mich.

John O'Meara of Escanaba, Mich., has put in a \$1000 soda outfit, which is said to be a beauty all around.

Charles R. Mabey, late with Lee B. Millard of Adrian, Mich., has opened a drug store at Britton, Mich.

Anton Hopper has bought the drug store of J. D. Congden & Co., at Pentwater, Mich.

The drug store of Henry Cleland, Montcalm and Clifford streets, Detroit, was entered by burglars recently and \$10 in money taken, besides some cigars and small articles.

E. M. Kennedy has purchased the stock and trade of F. H. Crooks & Co., Battle Creek, Mich. Mr. Kennedy was for several years in the employ of George McDonald of that city.

Howard Linsell, formerly a clerk in the drug store of James Verner & Co., on Woodward avenue, Detroit, has bought the stock and moved it to Grand River avenue.

A. H. Webber of Cadillac, Mich., has plans for a new brick store, with office rooms on the second floor. It will be perfectly modern in every respect and 25 x 75 feet in size.

Hall Bros. of Kalamazoo, Mich., have sold out to E. M. Kennedy & Co. Mr. Kennedy of the new firm has been for several years head clerk for George McDonald of Sturgis, and bears an excellent reputation as a pharmacist.

M. A. Young, who for several years was chief clerk for the Detroit Pharmacal Company, has purchased the store of C. A. Seeley of Lansing, Mich. Mr. Young is a graduate of the Ontario College of Pharmacy, Toronto, and has had nine years' experience in practical work.

C. E. Van Sickle has been exhibiting a queer freak in the window of his drug

store at St. Johns, Mich., in the shape of a lamb of one head, two bodies and eight legs. The lamb was born near Lowell, Mich. and is owned by Benjamin Weak's of Chicago.

On account of ill health John G. Wolf of Marshall, Mich., has sold his drug business to B. Vanderburgh of Detroit, and will take a rest, which he has well earned, having been actively in business for more than a quarter of a century. Mr. Vandenburg was for a long time in business at Alma, Mich.

E. G. Richards, a druggist doing business at 1457 Russell street, Detroit, was recently severely injured in a street car smash up. The accident happened directly in front of the residence of his partner, Dr. O. S. Bell, who was roused from his sleep at 1 a.m. to attend to the hurts of Mr. Richards.

The headquarters of the American Committee of Pharmaceutical Research have been established at Ann Arbor, Mich. This committee was organized last October by men prominent in pharmaceutical science, and Dr. A. B. Prescott, dean of the pharmacy department of the Michigan University, has been made chairman.

## ILLINOIS.

### Chicago Items.

C. B. Springer has opened a new drug store at the corner of Indiana avenue and Twenty-fourth street.

J. Gazzola, druggist, who was recently elected alderman, has sold his store at the corner of Madison and Loomis streets to J. C. Whitford.

The Emerson Drug Company have removed their offices from the corner of Randolph and Franklin streets to 171 Randolph street.

Robert N. Campion, Thomas W. Prindville and Lena Wilgenburg are the incorporators of the Pasteur Medicine Company, with a capital of \$2,500.

J. F. Rowley, maker of artificial limbs, has removed from 8115 State street to larger premises in McVicker's Theatre Building.

The Consolidated Perfume Company have removed from 182 Lake street to No. 100 on the same street, where they have more than five times the space they had in their old premises.

The Chicago Apothecaries' Society held its monthly dinner at the Bismarck, on Friday, April 24. There was no special subject before the meeting, and the evening was spent in a social way.

C. B. McCall until recently with the Phenique Chemical Company of St. Louis, is now the Northwestern representative of William R. Warner & Co., with headquarters at Minneapolis, Minn.

The Pasteur Anthrax Vaccine Company, Limited, have removed their offices from the Rialto Building to 56 Fifth avenue, where they have very commodious quarters.

Adolph G. Weisse, druggist, at 729 South Halsted street, will open a new store at No. 423 on the same street, in addition to his present premises. The entire bottle outfit was furnished by Whitall, Tatum & Co.

The Chemically Pure Chemical Company is the style of a new incorporation

in this city, with a capital of \$5,000. The incorporators are William M. Call, James R. Glass and William E. O'Neill.

The Wabash Avenue Pharmacy, Forty-third street and Wabash avenue, has just been refitted with an entire glass outfit, which was purchased of Whitall, Tatum & Co., through John F. Matthes, the resident Western manager.

F. A. Wheeler, druggist, at 5782 Wentworth avenue, has just refitted his store in good style. The bottles and glassware outfit were purchased from Whitall, Tatum & Co., through John F. Matthes, the Western manager.

F. W. Sihler retires from the Evans-Gallagher Drug Company of Kansas City, where he has been for a number of years, and goes to the Fort Wayne house of the Meyer Bros'. Drug Company to fill a managerial position.

The meeting of the Chicago Retail Druggists' Association, that was called for the 28th inst., has been postponed for a week, owing to the absence of the attorney of the association, and who was to address the meeting on some important issues. A report of the meeting will be given in our next issue.

Mr. Van Delden of Desmond and Mr. Van Delden of Clinton, Iowa, were here for a few days last week, making purchases for the new drug store that they are about to open. A. E. Remick will leave here for Kansas City on the 6th, and will attend the meeting of the Missouri Pharmaceutical Association at Excelsior Springs, Mo., on the 9th, in the interest of William R. Warner & Co.

## Why Not

increase your sales by serving your customers with a wine that after they once use it they will demand the same brand and quality, and will be particular to obtain the identical article again? This can be said of the Duroy port wine after they have once become familiar with it.

Druggists further have this satisfaction that the Duroy wines are sold only to retail druggists, hence there is no competition from any other class of dealers. The sale of this wine is being confined strictly to druggists. Over 10,000 retail druggists in the United States carry the Duroy wines to-day. So say the growers, Duroy & Haines, Sandusky, Ohio. See advertisement on page 22.

## Get Acquainted.

Those manufacturers whose products and processes are the most meritorious as a rule are the ones most willing to have consumers become acquainted with them. The Searle & Hereth Company, Wells and Illinois streets, Chicago, act on this theory and are so confident that the results of the trade becoming acquainted with their products and processes will be to their benefit that they pursue a most liberal policy, inviting the graduating classes of medical and pharmaceutical schools to visit their laboratories so as to see their processes, and offering to sell an introductory order for their goods at less than cost, so as to let the trade become acquainted with their products. See their advertisement on page 17. Cut it out and send for the fluid extracts. They are willing to stand or fall on the verdict you may pass on them.

## Mail Order Business.

On page 9 appears an interesting advertisement of Morrison, Plummer & Co., the well-known jobbers of Chicago. They make a point of calling attention to the manner in which a retail druggist can make up an order at his leisure on forms supplied by them with the aid of their druggists' ready reference. The facilities of this house are so well known to the retail trade that they need no extended notice here, but we would advise all our readers to carefully peruse their advertisement, and we are sure that they will find the time given to it profitably used.

## The Chemical Market.

In their market circular for June the Roessler & Hasselacher Chemical Company, 78 Pine street, New York, note the following changes in prices:

ADVANCED.—Potassium permanganate, large crystals to 22c., small crystals, 21c.

DECLINED.—Potassium cyanide, purified assaying, 98 to 99 per cent. pure, in cases of 112 pounds to 85c. They also announce the receipt of three awards made by the Jury of Awards of the World's Columbian Exposition, the awards covering: 1, Chemical colors and bright gold; 2, cyanide of potassium for mining purposes, and 3, chemicals and desilverizing process.

## Review of the Wholesale Market.

NEW YORK, June 8, 1896.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

Trade conditions in the several departments of drugs, dye stuffs and chemicals show no signs of improvement and business for the past month has been uniformly dull as compared with the two preceding months. The chief complaint comes from package dealers, who report a marked falling off in speculative inquiry. Jobbers also report a dull market, such orders as come to hand being for quantities to meet current requirements only, and the distribution on the whole appears to be running below the proportions of corresponding periods of previous years. The price changes continue in the interests of buyers without, however, stimulating the demands, which are weak and unimportant. The principal fluctuations are noted herewith:

ADVANCED.	DECLINED.
Aniline salt,	Castor oil,
Cinchonidine sulphate,	Opium,
Aloes, Cape,	Cod liver oil, Norwegianian,
Lycopodium,	Arnica flowers,
Jamaica ginger,	Gum chicle,
Sarsaparilla,	Sugar of milk,
Japan camphor.	Quicksilver,
	Potassium cyanide,
	Buckthorn bark.

## DRUGS.

Alcohol has developed no new feature of interest, either as regards price or demand, since our last. The popular quotation for five barrel lots remains \$2.81.

Balsam Fir is dull and the market is easy in tone with the nominal quotation from importers, \$1.90.

Balsam Peru is in better supply and sales are making within the range of \$1.90 to \$2.

Bark, Buckthorn, has eased off a trifle

since our last and the bale price is now  $8\frac{1}{2}$ ¢. with 4c. to 5c. asked for smaller quantities.

*Caffeine* continues quiet, but holders do not seek to urge the distribution below \$5.50.

*Cascara sagrada* has weakened somewhat in the interval in consequence of freer offerings for future shipment and the prospects of a large crop; we quote the range at  $8\frac{3}{4}$  to 6c. *Elm* is easier with  $9\frac{1}{4}$  to  $9\frac{1}{2}$ ¢. asked. *Sassafras* is dull and selling in small lots only; values have declined to  $6\frac{1}{2}$ ¢. to 8c.

*Cassia Buds* are more plentiful and the prices on the spot are somewhat unsettled and offers to shade 17c. were not uncommon.

*Castor Oil* has been reduced by the manufacturers to the range of  $9\frac{1}{2}$ ¢. to 10c. for barrels and 10c. to  $10\frac{1}{2}$ ¢. for cases. The decline in values is the result of an effort to meet foreign competition.

*Cod Liver Oil* has weakened to \$55 to \$65 for barrels, influenced by a quiet market here and lower prices at primary sources.

*Ergot* continues to offer at  $12\frac{1}{2}$ ¢. for German,  $11\frac{1}{2}$ ¢. for Russian and 16c. to 17c. for Spanish, with only small sales reported. Late reports from primary sources indicate poor crop prospects for Spanish.

*Lycopodium* is a trifle unsettled in the face of competition between holders. A fair seasonable demand is reported and higher prices are looked for.

*Menthol* is selling fairly in a jobbing way at \$8.40, though this figure is freely shaded on bids for quantities. A further decline is anticipated, as offers to arrive have been made at low figures.

*Nuphtaline* has weakened to  $2\frac{3}{4}$ ¢. to  $2\frac{1}{2}$ ¢. for ball in consequence of large additions to the stock in this market. Flake is scarce and held at  $3\frac{1}{2}$ ¢. to 4c., as to quantity.

*Opium* has developed no action of any consequence since our last. Continued weakness is yet the feature of the spot market and values have declined a fraction or two from the price last quoted. Single cases are generally offered at \$2, while \$2.05 is the quotation for broken lots. Powdered is maintained at \$2.70 to \$3, as to test.

*Quinine* continues to offer at 28c. to 30c. for domestic bulk and  $26\frac{1}{2}$ ¢. to 28c. for foreign, but important interest is yet

lacking, and only a moderate business is being done at these figures.

*Salicylic Acid* continues weak at the recent decline, and sales of cases and large quantities are reported at 40c. to 41c.

*Strontia Nitrate* is meeting with fair seasonable inquiry from fireworks manufacturers, and numerous jobbing sales are reported at  $7\frac{1}{2}$ ¢. to  $7\frac{1}{4}$ ¢.

*Sugar of Milk* prices have been revised by the manufacturers to 14c. to 15c. for first grade goods and 11c. to 12c. for second.

#### DYESTUFFS.

*Aniline Salt* has been advanced to  $14\frac{1}{2}$ ¢. to 15c., due to the scarcity and concentration of spot goods and advancing tendency in Europe.

*Cutch* only meets with a limited inquiry, though prices are well sustained on the basis of  $4\frac{1}{2}$ ¢. to  $5\frac{1}{4}$ ¢. for bales.

*Divi Divi* is fractionally lower, sales ex-ship in port being made down to \$84.

*Indigo* is rather neglected at the moment, but values are well sustained at the quoted range.

*Sumac* continues in moderate request, with sales of Sicily at \$45 to \$47.50 and Virginia at \$36 to \$37.

#### CHEMICALS.

*Acetanilid* continues in demand and firm at our prices, though reductions are made. It is stated, on quantity bids.

*Acetic Acid* remains quiet but steady at \$1.60 to \$1.65 for commercial.

*Bleaching Powder* is maintained at \$1.87 $\frac{1}{2}$  to \$1.95 for the English and \$1.70 to \$1.80 for Continental, and a moderate trade is reported at this range.

*Blue Vitriol* is in improved demand and the values are firmly maintained at the range of  $3\frac{3}{4}$ ¢. to 4c.

*Chlorate of Potash* continues weak and unsettled, with  $8\frac{1}{2}$ ¢. to  $8\frac{3}{4}$ ¢. asked for crystals and powdered respectively.

*Carbolic Acid* has declined a notch or two in sympathy with the foreign market, but the demand here continues of fair proportions and values are well sustained at the range of 16c. to  $17\frac{1}{2}$ ¢. for drums.

*Cream Tartar* has sold down to  $25\frac{1}{2}$ ¢. from second hands and considerable shading from manufacturers' prices is yet a feature of the market.

*Potass. Permanganate* is scarce on spot and values are firm at 20c. to 21c.

*Potass. Cyanide* has been reduced by the manufacturers to 35c. in consequence of active competition.

*Quicksilver* is fractionally lower and is now quoted at 50c., with numerous jobbing sales reported at this figure.

*Tartaric Acid* has been reduced by the manufacturers from 82c. to  $82\frac{1}{4}$ ¢. for crystals and from  $82\frac{1}{2}$ ¢. to  $82\frac{3}{4}$ ¢. for powdered. These figures are shaded in some instances from second hands.

#### ESSENTIAL OILS.

*Citronella* has hardened a trifle, with drums quoted  $35\frac{1}{4}$ ¢. and a further advance among the probabilities.

*Orange* is without important changes. Sales are making at \$2.75 to \$3 for bitter and \$1.55 to \$2.05 for sweet.

*Peppermint* is dull but quotably unchanged. Bulk is held at \$1.65 to \$1.90, the latter for Wayne County, and H. G. H. \$2.15 to \$2.20.

#### GUMS.

*Aloes, Cape*, continues to reflect an upward tendency, and is now quoted 7c. to  $7\frac{1}{2}$ ¢.

*Camphor* has been marked down by domestic refiners to 40c. to 41c. for barrels and cases respectively, Japan in 1 and 2 pound cakes has been advanced to 40c.

In other gums no changes of consequence have come to the surface.

#### ROOTS.

*Dandelion* has been in demand, with a sale of 1,000 pounds at 6c.

*Galangal* is developing a firmer tendency, and higher values are anticipated; jobbing sales at  $6\frac{1}{4}$ ¢. to 7c.

*Sarsaparilla* has sold largely in the interval, and a slight advance was asked and paid at the close; the jobbing quotation is now about  $5\frac{1}{2}$ ¢. to 6c. for Mexican.

#### SEEDS.

*Coriander* has eased off a trifle and sales of natural have been made down to  $2\frac{3}{4}$ ¢. and bleached 8c.

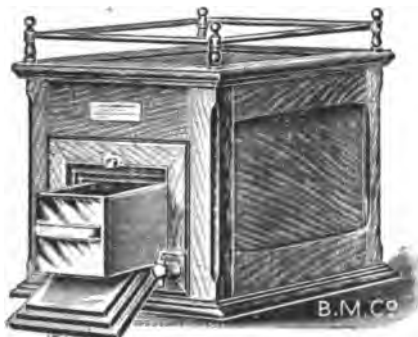
Other seeds are without new features. Sales are mostly in a jobbing way, and we have no important price fluctuations to report.

The June number of *The Druggist Sundryman* might be called a "special soda fountain" issue, as much space is devoted to descriptions of new conveniences for the fountain. A free copy will be sent to all druggists who request it from the publishers, Fox, Fultz & Co., 52 Park place, New York.

ASK US FOR A FREE COPY OF

## The Druggist Sundryman (JUNE, 1896.)

This number (32 pages) is devoted to fully illustrated descriptions of a general line of sundries, together with the latest devices and conveniences for the soda fountain. Among them is "our latest"



COMPLETE ❁ ❁

COMPACT ❁ ❁

FOX, FULTZ & CO.'S  
"Special" Ice Cream Cabinet.

For copy of this Druggist Sundryman address  
FOX, FULTZ & CO., 18 Blackstone St., BOSTON.  
52 Park Place, NEW YORK.



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## LET THE BUYER BEWARE.

"CAVEAT EMPTOR" is an old Latin proverb which will never lose force so long as men conduct business to make money. Some time since we called attention to the care which must be exercised in purchasing druggists' sundries and rubber goods; to the existence of short measure hot water bottles, of faulty graduates and other like ills to which the retail drug business is heir.

Our attention has recently been directed, by receipt of several letters from Vermont druggists, to the dangers which beset the purchaser of proprietary remedies, and to the necessity which exists in this, as in other lines, for caution on the part of the buyer. Dr. W. S. NAY of Underhill, Vt., is one of the most reputable and well known pharmacists of that State, and the letter from him, published in our correspondence columns, demands the careful consideration and attention of the trade.

Unfortunately both for Mr. GREEN and for the retail druggists who complain of the business methods of his agent, there is no method of determining satisfactorily the degree of responsibility which should rest with the agent soliciting the orders or the house itself. It seems that in view of the insertion of the clause in its contracts to the effect that all conditions of the contract must be specified in writing upon it, the firm is in a position to claim exemption from the fulfillment of mere verbal promises made by its agent.

On the other hand, it is so generally the custom to consider the statements of agents as binding upon principals, that the druggists who gave orders based upon the assurances of a person who was admittedly an authorized agent of G. G. GREEN would feel justly much aggrieved if the promises made were not carried out.

On the whole, it appears to be a case where one must fall back on the adage "Let the Buyer Beware," and we would caution all our readers when dealing with agents of any kind to make sure that every condition of the contract is specified

in writing upon the contract itself, for this is the only safe course, both for the seller and for the purchaser, since, however honest one's intention may be, there is always a possibility of a misunderstanding of verbal statements, which would be entirely done away with by making it a hard and fast rule to sign no orders or contracts which did not contain, in writing, an explicit and full statement of all the conditions forming part of the order or contract.

## SHALL THE STANDARD

### BE REVISED?

SO long as the Pharmacopoeia was merely a book of reference and a text book, the standards of quality set up therein were of scarcely more than academic interest, but they have now come to be of more practical importance to every retail druggist.

The first instance in which the practical and the scientific clashed in the Pharmacopoeia was in the matter of opium assay, and the voluminous contributions to this subject, which grew out of the stand taken by the United States customs authorities upon this matter, are in a great measure responsible for the much clearer insight into the limitations and possibilities of the various methods of opium assay which we now possess.

The several State laws regulating the traffic in food and drugs have naturally adopted the standards of purity and quality for drugs established by the United States Pharmacopoeia, and to judge from the results which have followed the enforcement of the laws in Ohio, the only State in which pure food and drug laws have been rigidly enforced, it would seem either that the pharmacopoeial standards should be lowered or that the drug trade is in a most lamentable condition as regards the quality of the materials in which they deal.

At the Denver meeting of the Pharmaceutical Association Prof. LLOYD showed very clearly that the pharmacopoeial standards set for mustard and flaxseed were too high. Later contributions by him on this subject would

also indicate that the Galenical preparations produced by the pharmacopoeial processes cannot be expected to come up to the standards set in that work.

#### REVISE THE PHARMACOPOEIAL STANDARDS.

With such conditions confronting them, druggists cannot hope to escape from annoyance and loss of good name and means, except through a liberal and enlightened interpretation of the law on the part of the executive officers charged with its enforcement, or through a change in the standards.

In a paper printed on another page Professor LLOYD points out a means of securing an equitable enforcement of the law, which consists in constructing it according to its spirit rather than its letter. His proposition is that committees of the State pharmaceutical associations, in conjunction with a committee of the American Pharmaceutical Association, recommend such modifications of the existing pharmacopoeial requirements as to purity as would bring the requirements into the range of practicability, and that State executive officers adopt the modified standards so devised. This method, however, has the great disadvantage that its success is wholly dependent upon the attitude of each individual charged with the execution of the law, who might or might not accept the recommendation made by the committees whose appointment is proposed.

More radical measures than these are needed, and it is within the province and power of the Committee of Revision of the Pharmacopoeia to act in this matter independently of any action of the American Pharmaceutical Association or of the State associations. Experience seems to have demonstrated the impracticability of obtaining drugs up to our present pharmacopoeial standards, and the Committee of Revision might well issue a supplement to the Pharmacopoeia consisting solely or principally of modifications of the prescribed requirements as to quality. Such modifications should be most cautiously made, and should err rather on the side of liberality than otherwise, for it is infinitely better to have a moderately high standard which is rigidly adhered to than to have a very high standard which is practically ignored, such as, to a certain extent, we have now.

The advantage which this method would possess would be that these proposed alterations, or rather modifications, in the pharmacopoeial standards would obviate any necessity for arriving at a mutual understanding with the executive officers of the various State commissions, and would also obviate the necessity for any change in the statutes of the several States in which the pharmacopoeial standards have been adopted.

#### FULL POWER TO ACT.

Full power for such a change as is contemplated in these suggestions rests in the committee, having been conferred by the pharmacopoeial convention in the fifth resolution regarding the basis of representation in the decennial convention of 1900, which reads as follows: "The committee is authorized and directed to publish a supplement at the end of five years if necessary." While it is possible that this resolution contemplated the appearance of a supplement five years after the issuance of the Pharmacopoeia, the resolution is so worded as to mean, if taken literally, that the supplement should have made its appearance in 1895, five years after the meeting of the convention.

That powerful class whose interest in pharmacy is didactic rather than practical may possibly oppose the changes suggested here on the plea that they are retrogressive rather than progressive, but the majority of the committee will no doubt agree with us in preferring to have standards that may reasonably be expected to be lived up to, rather than to have them impractically high. The results of the pure drug campaign in Ohio furnish *prima facie* evidence that they now are impractically high in many instances, and the testimony of Professor LLOYD corroborates this evidence. We commend this matter to the most serious consideration of the Committee of Revision, for if they can see their way clear to act along the lines indicated they will bring relief to a large body of druggists, and at the same time materially strengthen the position of the Pharmacopoeia as an authority.

#### THE PHARMACY OF THE NATIONAL FORMULARY.

##### III.

IN preceding notices of the new edition of the National Formulary we have taken occasion to point out some features of the work which impressed us as fitting subjects for criticism. Of the Formulary, as a whole, it may be said that no more satisfactory work of its kind has ever been published in any language, and the pharmacists of America are unique in the possession of such a convenient compendium of authoritative formulæ for the manufacture of the numerous extra pharmacopoeial compounds so largely prescribed by physicians. The new edition is, as we have stated before, in many respects an improvement over the old, but that much has been left undone in the matter of providing formulæ and processes for rational preparations to replace the large number of semi-proprietary preparations so extensively used is plainly evident.

That others besides ourselves have been impressed with this view of the matter is shown in the letter which we print on another page from the chief apothecary of the New York Hospital. The suggestions advanced by Mr. RAUSCHENBERG are timely and to the point, and we have pleasure in commending his communication to the attention of the Committee on National Formulary of the American Pharmaceutical Association.

#### SPECIFIC CRITICISMS.

The Sub-Committee on Corrections will be interested in the following criticisms, of which Mr. RAUSCHENBERG is the author and which he has kindly placed at our disposal. Beginning with page 4 he notes a typographical error in the spelling of the word *acidum* in the title to Formula No. 8. Formula No. 18 on page 5 consists of a process for the manufacture of Hydrated Oxide of Bismuth, and he very pertinently inquires why such a formula should appear. The substance is an easily procurable article of commerce, and no good reason exists for its appearance in the book; as well might formulas be given for the preparation of Bismuth Salicylate or Bismuth Subgallate. Formula No. 27 on page 10 calls for an 11 per cent. Salicylated Colloidion. The query is: Why such an uneven proportion? Would not 10 per cent. be as satisfactory, and more in conformity with the general idea of rounding out the proportions in such preparations? Severe criticism is meted out to the formula for Compound Elixir of Chloroform. "Why was it even admitted?" asks our correspondent. "Why with such barbarous proportions both of formula and approximate proportions in the dose? Why in the entire text, which is metric, is the fluid drachm dose given with no consideration for the metric equivalent?"

#### INCONSISTENCIES.

Our attention is called to an apparent lack of consistency in the statements appended to each formula regarding the proportions of drugs represented in each fluid drachm or ounce, as the case may be. Thus in formula No. 51, page 19, no proportionate equivalents are given at all; in order to make this formula correspond with others throughout the work a line should be added reading, "each fluid drachm contains 1-100 grain strychnine sulphate, 1 grain bismuth and ammonium citrate, and nearly 2 grains of iron phosphate. The foot note to formula No. 57 on page 21 reads, "each fluid drachm contains 3 grains of potassium iodide, and small quantities of the several fluid extracts." That the elixir contains small quantities of the several extracts is evident, and the quantity should be stated, or the entire paragraph omitted.

Written for the  
American Druggist and Pharmaceutical Record.

## THE MANUFACTURE OF FLUID EXTRACTS BY THE RETAILER.

BY COLUMBUS V. EMICH,  
Baltimore, Md.

*Is it possible for the retail pharmacist to procure first-class goods in quantities of from one to five pounds at such price as will enable him to prepare fluid extracts in competition with the manufacturer?*

This question was asked at a recent meeting of a State pharmaceutical association, and was answered in the affirmative.

The very natural question arises, was the answer correct?

To this end questions were asked of two representative wholesale houses in Baltimore. One is a house of standing, dealing in crude drugs, conscientious in their dealings with reference to quality and price, and liberal in their ideas. The other house makes a specialty of preparing assayed goods in form ready for displacement, besides a general wholesale trade, and has standing and reputation wherever known.

### MR. MUTH ON THE PURCHASE OF CRUDE DRUGS BY PHARMACISTS.

M. Jos. Muth of Muth Bros. & Co., answered the questions asked him seriatim, as follows:

**Question.**—Can the retail pharmacist procure first-class drugs in quantities of 1 to 5 pounds at reasonable prices?

**Answer.**—Any pharmacist can get the very best and choicest drugs in 1 to 5 pound lots if he is willing to pay the price for the same.

**Question.**—What would be the approximate difference in price of ordinary drugs to the retailer and the larger manufacturer?

**Answer.**—I would suppose that the difference in price for full packages and 5 and 1 pound lots would be from 10 to 15 per cent. On higher priced goods, such as opium, ipecac, etc., the difference would be about 5 per cent.

**Question.**—Has the wholesaler been compelled to pay more attention to the quality of his crude drugs than formerly?

**Answer.**—The wholesaler does not handle any better goods now than he did five or ten years ago. There is always a demand for choice goods, and the wholesaler can make a better profit on them than on ordinary goods; therefore keeps stock which pays him best.

**Question.**—Do you think the larger manufacturer has exceptional advantage in the procuring of the better grades of goods than falls to the lot of the conscientious retailer?

**Answer.**—I cannot conceive how it is possible for the larger manufacturer to get a better class of goods than the retailer. Any retailer who is particular in scrutinizing his goods, and is a competent judge of the same, can always find the choicest goods in the market as well as any wholesale manufacturer.

### MR. GILPIN'S VIEWS ON THE SUBJECT.

H. B. Gilpin of Gilpin, Langdon & Co. replied to my questioning as follows:

"It is of course assumed that the retail pharmacist wishes the best qualities, as in open competition a very marked variance in price as well as quality of drugs will be found.

"This circumstance is calculated to mislead any who give a cursory glance at the subject, as, while I do not care to assume that large manufacturers use inferior goods, yet it is a well established fact that a great many are consumed—viz., siftings of Senna, wormy ergot, old and inferior qualities of narcotic herbs—in fact, many drugs are classed as 'good for manufacturing purposes,' meaning that they are unsightly, stammy, inert, or in some way unsalable in their whole state.

"The larger manufacturer buys his drugs in open market under the same conditions as do drug millers, druggists or any other large buyers, and the approximate difference in prices to the retailer is regulated by the jobber's ideas of profit, which, I regret to say, are exceedingly small. In regard to the more costly drugs, such as opium, ipecac, etc., the same conditions hold good—in fact, the higher priced drugs are sold at closer margins, approximately, than the cheaper ones.

"The wholesale druggist has lately been compelled to pay more attention to the quality of his drugs, both whole and powdered. This is largely due to the higher education of druggists and the many articles written by authorities, as well as by the Government taking an active part in protecting the consumer, etc.

"The manufacturer has no advantage in procuring better crude drugs than any other buyer; but, on the other hand, as certain low grades of goods are styled 'suitable for manufacturing,' it would suggest the contrary."

No other houses were asked these questions, for the reason that it was presumed that the answers would mainly be of the same or similar tenor.

It will be seen that both answer the question affirmatively, and both consider the main question as being whether the purchaser is willing to pay the price for first-class goods.

This is true in every class of business; a demand for first-class goods will always be met by the producer or dealer, and the converse is also true that the demand for cheap goods will always find a provider.

### UNIFORMITY OF QUALITY.

Another question arises: Can the provider, in articles of growth, such as are here meant, always secure prime goods?

Undoubtedly variations in quality will occur, and it can readily be seen that the claim made by some of the large manufacturers that the superior capital and facilities for the examination and handling of goods enables them to procure the choice, and that in fact they only can procure such standard of goods as enables them alone to produce the manufactured goods of standard and reliable quality, and also that they frequently have difficulty in procuring round lots suitable to their purpose, is reasonable. And yet this is hardly sound reasoning to urge this as an advantage of the manufacturer over the retailer. Any housekeeper who has been compelled to market for his family well knows that he can frequently select small quantities of choice articles, when he could not procure a large quantity; and this will frequently be found to be the case with the small purchaser of drugs. He will be able to purchase well garbled goods in small quantities, when if he wished the gross lots he would be compelled to take them as they are, and this fact handicaps the large manufac-

turer and inures to the benefit of the smaller dealer.

Besides this, the wholesaler realizes a better profit from the small dealer, and the demand for these goods from the retailer the better enables him to meet the larger demands.

Whoever has handled the fine herbs put up in convenient sized packages and sent out by several responsible German houses, will fully realize the position assumed. The same is true of the similar goods sent out by a few firms from the English market.

A rather lengthy experience in the retail drug business warrants my indorsement of the answer and leads me to the belief that honesty and truthfulness are not yet lost arts in the wholesale drug trade.

### THE HISTORY OF FLUID EXTRACTS.

*Can the retail pharmacist make his own fluid extracts at prices that will enable him to sell them at retail in competition with large manufacturers?*

Fluid extracts were introduced into this country from England in or about 1834. In November, 1834, the late Chas. Ellis of Philadelphia published a formula for fluid extract of senna—the first formula for a fluid extract in the archives of American pharmacy. The next formula seems to have been published by M. Duhamil, in 1842, and was also for fluid extract of senna. In 1847 Mr. Ellis published a formula for fluid extract of valerian, and the same year the late Prof. Wm. Proctor, Jr., published the first formula for fluid extract of rhubarb. Within a short time after the last formula was published others followed, and the increase has continued until an immense development has taken place in their use and manufacture. It is curious to note, also, that this development has taken place simultaneously with the development of the art of percolation or displacement. Indeed, it would appear that but for the art of percolation fluid extracts would have had but small development.

At first all these preparations were made by the retail pharmacist, and the development of the business is due to pharmacists who entered the manufacturing business principally during the past 30 or 35 years.

Now, is it to be claimed that the education and training of the pharmacist of to-day is at all inferior to the education and training of the older pharmacists?

This will hardly be claimed by any persons who are at all familiar with the development of pharmaceutical education and training in the laboratories of our principal colleges.

### LABORATORY TRAINING BETTER THAN THE OLD STORE TRAINING.

It being granted that this education and training is superior to the old store training, it follows that the pharmacist is better fitted for entering on his work. The knowledge of analytical chemistry acquired by the student should, and we think does, prepare him for entering on the assay of crude drugs and his preparations.

The difficulty in the way seems to arise from the retail pharmacist being compelled to do too much of his own work at the counter, and when his business improves he thinks he can better afford to buy these articles and devote his time to his counter interests.

### ARE PHARMACISTS LAZY?

I have heard the statement made that the retail pharmacist generally is afflicted

with a peculiar disease, called laziness. Whether this be so or not, it is too true that many prefer buying instead of making their own goods.

We think this a mistake on their part, both on account of self interest and the loss of pride in their personal productions.

Those who take delight in making their own goods well know the enjoyment derived from the completion of a nice product. They will examine the crude drug, will ponder well the processes for extraction, and when the process has begun will watch it as carefully as a mother does her babe, and it becomes to many almost a living creature as they manipulate it to the finished product. He that cannot enjoy his work and rejoice over his success is not likely to be much of a source of gratification either to his *alma mater* or his friends.

#### THE QUESTION OF PRICE.

At this point the main question seems to be, can he produce these preparations within certain prices; and many stand appalled at the idea of preparing these goods with their limited facilities when they think of the superb equipment of the manufacturer. But just here a gentle hint. Fine equipment costs money and its use requires outlay of capital, and thus produces expenses which must be met.

#### THE APPARATUS NECESSARY FOR THE RETAILER.

consisting of a few good percolators, water baths, etc., for evaporating; if possible a good small press, preferably a good still, and heat appliances, cost but a small sum. Then, using the spare time that accrues to most retailers, and costs him nothing, he can in many instances effect desirable savings in the cost of his goods.

A natural result will be the increased effort to improve what he makes and sells, and a decided effort to effect this will be met by decided appreciation on the part of those whom he serves.

#### THE COMPARATIVE COST OF MANUFACTURE.

As to the cost of making these goods, I present a few made in the course of business, with the comparative price of the manufacturer. I am unable to make the comparison from goods made at present, but am compelled to take the prices a few years back. What was true then is true now, as will be demonstrated by any one making the effort.

These extracts were prepared by the official process of the Pharmacopoeia, save that, as the exhaustion of the drug took place, the top portion was taken from the percolator and subjected to the action of a screw press, and the liquid used in the further percolation. The fluid extracts of buchu and ergot were prepared according to Dr. Squibb's process of re-percolation, no effort being made to recover the residuum in the marc:

#### COST OF FLUID EXTRACTS.

	Cost to make per pint.	Cost to buy per pint.
Pareira brava.....	\$0.85	\$0.75
Eucalyptus.....	.91	1.81
Cimicifuga.....	.75	.90
Pulsatilla.....	.75	1.85
Jaborandi.....	.82	1.85
Liatris odor.....	.72	1.05
Calumba.....	.86	1.06
Damiana.....	1.38	1.88
Aconite root.....	1.15	1.09
Senna.....	1.19	.85
Buchu.....	1.56	1.50
Bumbul.....	1.45	1.88
Ergot.....	2.10	2.25
Senna co.....	1.10	1.25
Sarsaparilla co.....	1.06	1.25

Rubi procumbens.....	.80	.88
Goesypium.....	.64	1.09
Uva ursi.....	.67	.75
Taraxacum.....	.80	1.05
Stillingia.....	.54	1.12
Gentian.....	.45	.80
Santalum alb.....	1.04	1.80
Hops.....	.75	1.50
Podophyllum.....	.58	.94
Hydrastis can.....	.70	1.05
Guarana.....	1.82	2.30
Ipecac.....	1.95	2.70

I have taken these figures, giving the actual cost to me just as they come in my

memorandum book, and have made the comparison with the printed list of a well-known manufacturer, deducting from the manufacturer's list the discount allowed the retailer. Latterly I have not been keeping a record of the cost, though always figuring up the cost for each preparation when made.

These prices will show an advantage to me in their cost, and I am compelled to think each one who makes the test will arrive at the same conclusion.

## The Perfume Industry in Australia.

Enfleurage—Preparation of the Fat—Hot and Cold Processes—Synthetic Chemicals Replace Certain Plant Odors—Attar of Roses Still Worth More than Gold—The Government Scent Farm—Perfumery Pointers—Results of Flower Farming.

BY W. LODIAN,

Foreign Correspondent of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

(Concluded from page 327.)

We now come to the fat process, which can be used cold or hot. The cold process is effected by means of a number of wooden trays with glass bottoms. Clarified fat is spread  $\frac{1}{4}$  inch thick on each side of the glass; then flowers are gathered at early morning and the flowers only are spread on the fat, and the trays piled one on the other, thus inclosing all the flowers. Fresh flowers are placed every second day, and thus renewed 12 to 15 times. The fat is then scraped from the trays and broken up into very small pieces and digested in spirits of wine 60 over proof—say 2 pounds of fat to  $2\frac{1}{2}$  pounds of alcohol. It is stirred every day for one month, and kept covered and carefully bottled, and labeled Extract of the Flower No. 1. Repeat the digestion by adding 1 pound of fresh alcohol for one month; then pour off and label Extract No. 2, or Double Extract. Again repeat the same thing with 1 pound of alcohol; pour off a third time and label No. 3, or Triple Extract. We have now three bottles, all containing different strengths of extracts, and all of value, according to their strength. The fat is now melted in a *bain marie* to pour it off and to be stored away for a similar use next year.

#### HOW TO MAKE THE CLARIFIED FAT.

Take 7 pounds each of beef, mutton and pork fat; chop them fine on a board and wash them in clear cold water; then put in a boiler with 5 gallons of water; put on the fire, and add 2 ounces of alum and a handful of coarse salt and 40 cloves. Boil until all the fat is melted. Then get another basin with 5 gallons of fresh water, and skim the fat through a wire strainer into the fresh water. Now boil again a second time, adding same quantity of salt and alum, for one hour, and then let cool.

On each occasion of its cooling a dark colored sediment is found at the bottom. This is carefully scraped away, and when the fat is perfectly white and pure throughout it is remelted and put away for use.

#### THE HOT PROCESS.

Take, say, 2 pounds' weight of flowers, being careful that there are no stems; put them in a round tin; melt 4 pounds of clarified fat, with only just sufficient heat to melt it, and pour it over the

flowers and leave covered until next day. Now get a larger dish with hot water, to melt the fat on the principle of the glue pot. The French people call this a *bain marie*. Procure another round tin with 2 pounds' weight of the same flowers; place two strips of wood on top of this to hold the sieve. Now pour the melted fat so as to strain the leaves, and allow the fat to fall on the fresh lot of leaves in the second tin underneath. Cover up and again leave until next day. Clean the first tin ready for the morrow, so as to repeat the operation each day for 14 times, when the fat will be fully charged and is ready to be digested in spirits of wine, as has been described for the cold process. Great attention must be paid that in the hot process; only sufficient heat is required to cause the fat to melt and flow, as the extracts are very volatile at a high temperature, and a great loss may be occasioned by overheating the fat.

If more rose leaves are gathered than can be used on the same day, sprinkle them with salt, when they will hold their scent for a few days. This is called salting the leaves.

Olive oil is also used for one or two perfumes in preference to fat, and is also digested in spirits of wine with the same treatment as for the cold process.

#### WHAT IT DOES NOT PAY TO CULTIVATE.

The perfume making business of the present time is not what it was like in times gone by, and the data about it in different encyclopedias, "divers' death holes," is almost quite out of date. The progress of chemistry has been so quick in recent years that many aromas hitherto taken from flowers are now manufactured by chemical combinations and adulterations by manufacturing druggists. Examples: The fragrance of the simple violet, and its notable modest odor, is now gotten by chemical process. Attempts have even been made to obtain it from the urine of diabetic patients. The flower heliotrope has lost its fame as a commercial perfume plant. Chemists have learned how to turn out from other sources an artificial article which is an exact substitute, the product quite surpassing, it is given out, in quality, consistency and likeability, to the real thing of nature, the odor forced from the flower itself. Even the household lilac has not been permitted to retain the exclusive privilege of its aroma-breathing

characteristics, for the man of the pestle and mortar obtains it chemically. Chiefly, these artificial scents are obtained synthetically from refuse coal tar. Grain musk is beaten out of the market by a chemical called "tonquinol."

#### ATTAR OF ROSES.

Nature has many flowers. Gold is heavy, but roses are not, yet the essential oil of roses is worth more than gold, weight for weight. Of all botanical growths, the otto (same as attar) of roses finds the readiest market. It is always in demand. Like the most precious of auriferous metals, too much cannot be obtained. In a fairly prosperous year 800 pounds weight of roses will yield 1 ounce of attar, or oil, and a lot of fragrant and salable rose water. The petals are placed in a still, the vapor volatilizes the attar, and both steam and oil ascend, wind their way through the spiral condenser, and pass out at the other extremity into the receiving vase.

The correct kinds of roses to grow are the centifolia or *chou rose* (rarely seen Antipodes-ward), and the rose of France, also called rose de Grasse, after the celebrated flower and perfume producing region of France, a place twice visited by the present writer, in 1891 and 1892. An acre of land under first-class cultivation will yield at least 1,500 pounds of rose petals, and this will give 5 ounces of attar, worth from 85 to 49 shillings each ounce; and there will also be some 300 gallons of rose water, valued at 8 to 4 shillings per gallon.

#### THE GOVERNMENT SCENT FARM

is situated 6 miles from Dunolly. It consists of about 1,300 acres. Twenty acres have been planted gradually from cuttings in three years, under the able management of Francis Mellon.

The list of plants on the Farm at present are as follows. They are arranged alphabetically, with order of planting and method of treatment, so as to bring the industry within the grasp of the most simple-minded persons desirous of embarking in the industry.

1. *Anise, or Sweet Fennel*.—The flowers and stems are distilled. Will grow in any soil. Rows 6 feet apart, plants 8 feet.

2. *Boronia*.—Good garden soil required. Rows 6 feet, plants 6 feet. Perfume extracted by the fat process.

3. *Pelargonium Radula*.—Geraniums of Grasse and Africa require good open soil, and are planted in rows 6 x 8 feet. Process: Distillation of stem, leaves and flower cut down to 6 inches from the ground.

4. *Jonquil*.—Sandy soil, planted in rows 8 feet apart and plants 1 foot apart. The flowers are treated by the fat process.

5. *Lavender, Verd*.—Gippeland climate more suitable; sandy soil; planted 8 x 8 feet; cut within 6 inches of ground and distilled.

6. *Lavender, Spiked*.—Same as *Lavender Verd*.

7. *Mignonette*.—Any ordinary soil. Sown 8 x 1 feet; treated by fat; the flowers only.

8. *Myrtle*.—Good soil; planted 4 x 8 feet; require good soil in Gippeland ranges, sheltered from hot wind. Leaves and flowers distilled.

9. *Orris Root*.—Sandy soil; 18 x 12 inches. Every three years root out and cut  $\frac{1}{4}$  inch below the leaves. Replant at once. Gather the roots in a heap to heat; peel carefully and clear and dry in a shed and distill the peel.

10. *Pennyroyal*.—Plenty of moisture. Plant 8 x 8 feet; cut down close to ground, and distill when in bloom.

11. *Peppermint*.—Good soil; moist climate; do well in flats; planted 8 x 8 feet; cut close to ground, and distill in autumn.

12. *Rose of Grasse*.—So called from its having been propagated at Grasse, in the South of France. It is the only rose that is commercially valuable for the extraction of the oil essence. It is a hardy plant; thrives well even in the poorest soils. Plant 8 x 4 feet. Distill to obtain the otto of roses and pure rose water. To obtain the extract of roses, treat by fat process; pinch close to petal.

13. *Rosemary*.—Grow anywhere; plant 8 x 8 feet; cut within 6 inches, and distill when in bloom.

14. *Thyme, Common*.—Plant 8 x 8 feet in fair soil; allow to soak for five hours in tepid water, then distill.

15. *Thyme of the Alps*.—Treated same as the common thyme, without soaking.

16. *Tuberose*.—Sandy soil; plant 8 x 1 feet, and treat by fat process—flower only.

17. *Verbena*.—Rich loamy soil; plant 6 x 6 feet; cut the green boughs just past small branches in bloom, and distill.

18. *Violets*.—Grow anywhere; plant 8 x 1 feet; treat flower only, by fat process.

19. *Wallflower*.—Grow anywhere; plant 8 feet by 18 inches; treat flowers only by fat process.

20. *The Bergamot, or Seville Orange*.—Twelve by twelve; sheltered spot; good soil.

#### A FEW PERFUMERY POINTERS.

Never grow plots of flowers too close together. Reason: If you group various kinds of scent plants too near to each other—as lavender here and pennyroyal next door—each one will become tainted one with the other, and the virgin aroma of each will be confused and the distilling will not improve them. An acre of roses or jasmine, for instance, should be separated by, say, an acre of potatoes or cabbages, or whatever you like to grow in the way of edibles.

The plants are all arranged in rows running due north and south, so as to get the greatest and longest benefit from the sunshine. On the influence of the sun consists, in a large way, the superiority of the oil extracted.

For every perfume a separate still is not entirely required, as by a single dose of sulphuric or oil of vitriol (1 part to 20 of water) the still is properly cleansed. A 20-gallon still costs £5, one of 50 gallons £30, and one of 300 gallons £80. To begin with, a flower grower in a small way finds a 20-gallon still ample.

#### PROPAGATING FRAME.

This can be made of any size, according to requirements. The depth should be about 80 inches. In the bottom may be placed 6 or 8 inches of rich mould and on that 12 inches of sand.

The distances given between the rows and plants have been so arranged on the scent farm as to allow for cultivating the soil with horse and scarifier. In the case of small garden plots worked by hand the rows could be cultivated at lesser distances.

#### RESULTS.

Results per acre of some of the principal plants:

An acre of lavender, on good soil, will require about 5,000 plants. The third year every 100 plants will average 1

pound of oil, thus giving a yield of 50 pounds of oil, worth 10 shillings per pound. Say the cost of working is £5 per acre—this will leave a profit of £20 per acre.

An acre of peppermint planted in good soil—say a rich river flat in a moist locality, will give a result of 20 pounds of oil at 80 shillings the first year, 25 pounds the second year, 30 pounds the third year. These figures are below the actual results obtained, and show this plant to be a valuable one when cultivated for the distillery.

The geranium rose is a hardy plant, and a very profitable one, yielding a very large percentage of oil, which is used for mixing with the oil of roses. This geranium is a native of France, and is known as the geranium of Grasse. It resembles closely the pelargonium radula, and can only be determined by an examination of the plant by an expert. The geranium of Grasse possesses a rich glutinous substance in the leaves, with an aroma slightly resembling the scent of the rose. The Pelargonium radula and some other species, when examined, have the same construction of leaf and blossom, but are deficient in oil, containing a large percentage of water, and the aroma is altogether different and can easily be detected by an expert. Intending planters, therefore, should be careful to obtain the correct plant, or very great disappointment and loss of money and time may be the result.

The rose of Grasse is a rose specially propagated in Grasse for the production of the oil of roses. This is the only rose of any commercial value, as it contains a sufficient quantity and quality of the attar of roses to make the treatment of it by distillation and the other processes a lucrative industry.

It will suffice to mention that annually over 1,000 tons of roses are grown at Grasse and distilled, and this enormous quantity is still not sufficient to meet the demand of the various foreign markets for the oils and extracts of roses. The cultivation of this plant at the Government scent farm proves it to be a profitable one, easily grown from cuttings planted in the winter, and will thrive in any soil. Our sunny climate would favor its growth considerably more than its native climate of Grasse. Its treatment in the still is so simple and expeditious that, when properly known and understood in these colonies, it may confidently be anticipated that thousands of acres of ground will be cultivated with this beautiful species of the rose family.

With respect to poor families and village settlers with children, when an immediate return is desirable, and time is an object, as the plants we have enumerated—viz.: lavender, geranium and roses—only get into full bearing in three years, it may be recommended to plant and propagate these gradually; but in the meantime mignonettes may be sown cheaply in large quantities, and violets, tuberose and jonquils may be planted, and these can be treated the same year by the simple processes of extraction of fat as described previously. By these the means may be obtained in a few years for the humble settler to procure a still.

#### THE FUTURE OF THE INDUSTRY.

Will the industry of scent and perfume farming pay? This is the all-important question which is advanced, and the answer to which is being eagerly sought after before launching out into the expense of planting extensively.



# A Synopsis of the Pharmacy Laws of the United States.\*

A Summary of the Principal Provisions of the Various Laws Pertaining to the Practice of Pharmacy.

BY PROF. J. H. BEAL,  
Scio, Ohio.

**T**HE object of the following papers is to present in a form convenient for reference, and free from legal verbiage, the principal features of the several pharmacy laws of the American Union, the provisions chiefly referred to being as follows: The dates of enactment and amendment of the laws and the extent to which they apply over the State. The constitution and selection of the examining boards, their revenues, powers, and compensation; the grades of licenses issued, the legal qualifications of licentiates, and the credit allowed for diplomas in medicine and pharmacy; and the fees for registration and renewal, provisions affecting adulterations, the labeling of poisons, etc.

*Unless otherwise expressly stated in the abstracts given it is to be understood:*

1. That each law applies territorially to the entire State which enacted it.
2. That the style of the examining board is simply Board of Pharmacy or State Board of Pharmacy.
3. That the number of years for which the members hold office is equal to the number of members on the board, i.e., if the board has five members the term of office is five years.
4. That the statutory titles of the licentiates are Registered Pharmacist and Registered Assistant, or Assistant Pharmacist.
5. That the certificates of other boards and diplomas of colleges of pharmacy and medicine are not recognized by the law.
6. That there is no statutory requirement of age and experience.
7. That no renewal of registration is required.
8. That the Pharmacy Act does not prohibit adulterations nor require the labeling of poisons.
9. In general that when the abstract does not mention any particular subject, it is because the pharmacy law is silent upon the point in question.
10. That certain provisions uniformly present in all the laws are omitted, such, for example, as the provision for the registration without examination of those engaged in pharmacy at the time of enactment of the law. Such provisions are of temporary and local interest only and would occupy space without imparting information.

In order to avoid needless repetition, the following general forms of poison and label laws are given, and are referred to by number under the States which have the same or similar provisions:

## General Form of Poison and Label Law.

### FORM NO. 1.—Schedule A.

Arsenic, and its preparations, corrosive sublimate, white precipitate, red precipitate, red mercuric iodide, potassium cyanide, hydrocyanic acid, strychnine, and all other poisonous alkaloids and their salts, essential oil of bitter almonds, opium and its preparations, excepting paregoric and other preparations of opium containing less than 2 grains to the ounce.

### Schedule B.

Aconite, belladonna, colchicum, conium, nuxvomica, henbane, scylin, ergot, cotton root, cantharides, crocote, digitalis, and their pharmaceutical preparations, croton oil, chloroform, chloral hydrate, zinc sulphate, mineral acids, carbolic acid and oxalic acid.

The articles contained in both schedules must be labeled, both on the container and on the outside wrapper, with the name of the article, the word "Poison," and the name and place of

business of the seller. Nor may any such article be delivered until it has been ascertained that the purchaser is aware of its poisonous character and desires it for a legitimate use. In addition to the preceding, when any article in Schedule A is sold an entry must be made in a book kept for the purpose, stating the date of the sale, the name and address of the purchaser, the name of the article, the purpose for which it is to be used, and the name of the dispenser. This record must be preserved for at least five years. The requirements as to labeling and recording do not apply to poisons dispensed on physicians' prescriptions, when not in unusual quantities or doses.

### FORM NO. 2.

The same as No. 1, except that all named poisons are embraced in one schedule and that the recording of the circumstances of the sale is not necessary.

Variations from the above forms are noted under the laws in which they occur.

It should also be remembered that the synopsis purports only to give the provisions of the "Pharmacy Act" itself. The criminal code of the State may contain other laws affecting the practice of pharmacy, or the State Board may have rules fixing fees less than allowed by the statute, or requiring age and experience when the law does not. In only a few laws are such facts referred to.

Some of the laws are so loosely drafted as to leave the meaning of certain provisions in doubt. In such cases the writer has adopted that interpretation which seemed to him most probable.

In some instances the date of enactment could not be obtained, and in the case of a few others the dates given are open to doubt. The writer will be thankful for the correction of any errors which he may have made. The writer desires to express his obligations to the Secretaries of various boards, for courtesies shown, and to Caswell A. Mayo, Editor of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, for assistance in procuring copies of the laws and for revising the abstract of the laws of New York.

## Oklahoma.

Enacted 1890. Amended 1893, 1895.

The "Board of Pharmaceutical Examiners" consists of three members appointed by the Governor from nominees of the Oklahoma Pharmaceutical Association. No one who habitually uses intoxicating liquors can receive the appointment.

The members receive \$5 per day and expenses, provided the per diem and other expenses for any one meeting do not exceed the sum received from fees at that meeting. All fees received must be covered into the territorial treasury. The board is required to hold four meetings per year. The law provides for "qualified pharmacists" and "assistants in pharmacy." The first must be 21 years of age, but no time of experience is specified. An assistant must be 18 years of age, and have two years' experience. Graduates of "recognized" colleges of pharmacy and licentiates of other States are registered as pharmacists without examination.

The fee for examination and registration is \$5, for registration without examination \$3. Every licentiate must report annually his continuance in business to the secretary of the Board of Pharmacy. For this no fee is required, but for failure to report within 30 days of the stated time a fee of 50 cents is charged, and if upon notice from the secretary a report is not made within 30 days, the name is dropped from the register, and can be restored only by payment of \$5. On change of place of business from one town to another, licentiates must report and pay a fee of 50 cents.

Every person applying for registration, either as pharmacist or assistant pharmacist, must file an affidavit stating that he does not habitually use intoxicating liquors, and that he has not been in the business of selling such liquors within two years.

The poison and label law corresponds to Form No. 2, except that every sale must be registered as in Form No. 1.

For a second conviction for violating the poison and label law, certificate of registration is revoked.

Itinerant vendors of any drug, nostrum or appliance, who publicly profess to cure disease or deformity, must pay a yearly license of \$100 into the territorial treasury.

Failure to expose certificate of registration in a conspicuous position is punished by cancelling registration.

By a separate action of the general statutes willful adulteration or dilution of food, drink or drugs with intent to deceive is declared a misdemeanor.

## Oregon.

Enacted 1891. Amended 1895.

The Board of Pharmacy consists of five members selected and appointed by the Governor. The secretary receives a salary, which is fixed by the board, and his expenses, and the other members \$5 per

\* Abstracts of the laws of the following States have been published in this series: Alabama, Arkansas, California, Colorado and Connecticut in the issue for March 25, p. 180; Delaware, District of Columbia, Florida, Georgia, Idaho and Illinois in the issue for April 10, p. 213; Iowa, Kansas, Kentucky, Louisiana, Maine and Maryland in the issue for April 25, page 246; Massachusetts and Michigan in the issue for May 11, page 272; Minnesota, Mississippi, Missouri and Montana, in the issue for May 25, page 298; Nebraska, New Hampshire, New Jersey, New Mexico, New York State, New York City, Erie County, Kings County, North Carolina, North Dakota, Ohio, in the issue for June 10, page 331.

day and expenses. All moneys received by the board are to be held as a fund for its expenses. The board is required to hold meetings quarterly.

The law provides for two grades of licentiates. The law does not fix the age or term of experience for pharmacists, but assistant pharmacists must be 18 years of age and have two years' experience. Graduates of regularly incorporated colleges of pharmacy, and licentiates of other States, may register without examination. The law distinguishes between graduates in pharmacy and licentiates in pharmacy, the last term being applied only to those who are registered by examination.

The fee for examination and registration is \$5 for both grades. An annual renewal fee is required—\$1 for pharmacists and 50 cents for assistants.

Unregistered persons may deal in patent and proprietary medicines.

Druggists are held responsible for the quality of goods dispensed by them, except when sold in original packages, and proprietary articles.

Intentional adulterations or substitution in prescriptions is declared a misdemeanor, and on conviction therefor is punished by revocation of registration.

The Poison and Label law corresponds to Form No. 2, with the following exceptions: The list omits red precipitate, mineral acids and the words "all other poisonous alkaloïds and their salts," and includes by name "morphine, cocaine and their combinations" and the words "all other deadly poisons." The circumstances of the sale of a poison must be recorded as provided in Form No. 1.

Penalties recovered for violations of the law are divided equally between the Board of Pharmacy and the common school fund.

### Pennsylvania.

Enacted 1887. Amended 1891, 1898, 1895.

The "State Pharmaceutical Examining Board" consists of five members selected and appointed by the Governor. The members receive \$5 per diem and expenses, and the secretary such additional compensation as the board may allow. The receipts of the board are to be held as a special fund for administering the act. The board must hold examinations at least quarterly.

Two grades of licentiates are recognized. Pharmacists must have four and assistants two years' experience.

The fee for examination and registration is \$3, with a triennial renewal fee of \$3.

"Storekeepers" may sell proprietary and patent medicines and "the commonly used medicines and poisons," provided they comply with the sections relating to adulteration and the labeling of poisons.

The widow or legal representatives of a deceased pharmacist may continue the business, provided the actual dispensing of medicines and the sale of poisons be done by a *qualified assistant*.

The intentional adulteration or falsification of any drug or preparation recognized by the U. S. P., or intended to be used in medicinal practice, and the willful sale of the same, are declared a misdemeanor.

A poison is defined as a substance liable to be destructive to adult human life in quantities of sixty grains or less.

Every such substance must be plainly labeled with the name of the article, the word "Poison," and the name and place of business of the seller.

If poisonous in quantities of 5 grains or less, the sale must also be recorded, with the name of the seller, the name and residence of the buyer, and the purpose for which it is to be used. No poison may be dispensed until the seller has ascertained that it is to be used for a legitimate purpose. The last two provisions do not apply to the sale on prescriptions nor to *agriculturists of substances commonly used as insecticides*.

### Rhode Island.

Enacted 1871. Amended 1874.

The State Board of Pharmacy consists of seven members selected and appointed by the Governor. The term of office is three years. The board is required to meet twice a year. The law contains no statement as to compensation, but it is provided that the fees received shall be appropriated to defray the expenses of the board.

There are two grades of licentiates. The age and experience of registered pharmacists are not specified, but they are to be such persons as "shall have given the State Board of Pharmacy satisfactory evidence of their qualifications." Assistant pharmacists must have three years' experience and sustain examination. The board may grant pharmacists' certificates to those who have passed the assistants' examination. Graduates of "regularly incorporated colleges of pharmacy" may be registered as pharmacists without examination.

The fee for examination and registration is \$10. An annual renewal is required, for which a fee of \$1 is authorized. The "board may, in their discretion, refuse to renew any such registration, and for good and sufficient cause discontinue any registration previously granted."

A pharmacist's certificate can be used for only one place of business. If a proprietor owns more than one store he must place a registered pharmacist in charge of each. A licentiate who changes his place of business without notifying the board ceases to be a registered pharmacist.

In places where there is no registered pharmacist within three miles, "any person may sell the usual domestic remedies," provided they are put up by and bear the label of a registered pharmacist, and provided also that such persons annually procure a permit from the Board of Pharmacy, the fee for which is \$1. General dealers may also sell patent or proprietary medicines, unless they contain one or more of the articles enumerated in the schedule of poisons.

The poison schedule contains 12 items, as follows: Arsenic and its preparations, cotton root and its preparations, corrosive sublimate, potassium cyanide, ergot and preparations, hydrocyanic acid, opium and preparations, except paregoric, oxalic acid, savin, strychnia, oils of bitter almonds, pennyroyal, savin and tansy, and articles recommended or sold as emmenagogues and parturients. Every such article must be labeled and the sale recorded in the same manner as is provided in Form 1. Poisons dispensed as a part of prescriptions are excepted from this provision.

The original of every prescription must be preserved for five years. Upon request

the pharmacist shall furnish copies of the same to the prescribing physician and the person for whom prepared.

Adulteration and sophistication are prohibited and punished by revocation of registration. It is made the duty of the State board to investigate reported cases of adulteration, procure analysis of suspected articles, and to assist in the prosecution of persons guilty of adulteration.

An unusual feature is the provision which applies to wholesale druggists, requiring them to keep registered assistant pharmacists in charge of their compounding and dispensing departments.

### South Carolina.

Enacted 1876. Amended 1882, 1894.

The pharmacy law is contained in the act of incorporation of the South Carolina Pharmaceutical Association.

The "Board of Pharmaceutical Examiners" consists of six members elected by the State Pharmaceutical Association. Their compensation is not named in the statute. The board must meet three times per year.

There is but one grade of licentiate. The law requires that every "examination must include the reading of manuscript prescriptions and explanations thereof, the discovery or detection of unusual doses of drugs, and especially poisons, the recognition and distinguishing of the various roots, barks, leaves, fruits, resins and gums in common use, and the proper antidotes and mode of administration thereof for the different poisons."

The act of the Legislature is silent as to age and experience, but by a by-law of the association the licentiate must be 21 years of age and have three years' experience.

Graduates of reputable colleges of pharmacy are registered without examination on payment of \$5. The regular fee for examination and registration is \$10, with an annual registration fee of \$1. The money received from fees is paid to the State association.

In places of three hundred inhabitants or less, where there is no registered pharmacist, practising physicians may compound and sell medicines upon obtaining a special license from the board and paying a fee of \$5. Shopkeepers and merchants may sell "medicines already prepared," provided they attach thereto a copy of the label attached by the wholesale druggist, and comply with the provisions relating to the labeling and sale of poisons.

Sales of "arsenic and its preparations, all metallic cyanides, and cyanides of potassium, tartar emetic, corrosive sublimate, aconite and its preparations, strychnine and all other poisonous alkaloïds and their salts, cantharides, ergot, and hydrocyanic acid" shall be recorded in the same manner as provided in Form No. 1. All of the above articles and oxalic acid, chloroform, belladonna and its preparations, opium and its preparations except paregoric, digitalis and its preparations, henbane and its preparations, hemlock or conium, and any other article that may be added to the list by the South Carolina Pharmaceutical Association, shall, when sold, bear a label the form of which has been fixed by the association, written or printed in red ink, with the name of the article and the name of at least one antidote, and directions for using the same.

(To be continued.)



**Thiopyrophosphates.**—M. Ferrand has prepared thiopyrophosphates having the general formula  $M_2P_2S_6$ , and has later described a series of salts whose formula is  $MPS$ , and which he describes as thiopyrophosphates. So far he has prepared and described (*Compt. Rend.*) the iron, silver, nickel, chromium, zinc, cadmium, mercury, lead and aluminum salts. Most of these compounds are decomposed by both acids or alkalis.

**Urea Made Synthetically from Guaiacol Carbonate.**—P. Cazeneuve has recently published the fact that on treating guaiacol carbonate with alcohol which has been saturated with ammonia gas, the carbonate is rapidly converted at the ordinary temperature into urea and guaiacol. As the reaction progresses the crystals of carbonate dissolve in the liquid with a yellowish, turning to a greenish, color, and upon evaporation the urea is yielded in long fine needles.

**The Examination of Honey.**—The Pharmacopœia of the Netherlands prescribes as a test for the purity of honey that when dissolved in its own weight of water, and when 4 volumes of strong alcohol are added to this solution, no precipitate should be produced, the appearance of a precipitate indicating adulteration either with glue or dextrin. Boerrigter states (*Neder Tijdschr. V. Pharm.*) that pure honey may give a precipitate under these circumstances with alcohol if it contains much albumen, which must be considered as a normal constituent of honey. The precipitate formed by albumen, however, may readily be distinguished by its appearance from that formed by dextrin, since the latter adheres to the sides of the receptacle, while the albuminous constituents separate out as flocculi. Nevertheless, it is necessary to bear this in mind in applying the test.

**Preparation of Formaldehyde Gelatin.**—The difficulty which has been experienced in completely drying and powdering formaldehyde gelatin has been overcome by Van Vloten (*Chem. Zeit.*) by beating the gelatin solution into a froth and allowing it to cool completely and harden in this form. He recommends the following process: Dissolve a sufficient quantity of first quality gelatin in about four times its own weight of water; pour this solution into a previously warmed mortar; add the requisite quantity of 40 per cent. formaldehyde solution and mix thoroughly. In consequence of the thin consistence of the gelatin solution the reaction proceeds slowly, so that one has sufficient time to beat the solution into a froth by means of an egg beater. On allowing to stand a short time a small quantity of liquid settles to the bottom, and before congealing the foam may be

put into any desired receptacle. If the gelatin solution be too dilute, a liquid separates out on standing a short time. The formaldehyde gelatin foam resembles very much the dried, beaten white of eggs and may be easily reduced to powder.

**Odorless Distilled Water.**—In a recent issue of the *Pharmaceutische Zeitung* Dr. Hänsel states that he has succeeded in producing odorless distilled water from a perfectly new still by substituting asbestos packing for the rubber packing ordinarily used in still joints. Where rubber packing has been used, he found some odor even after the still had been actively in use for half a year.

**The Detection of Alum in Bread.**—J. Vanderplanken calls attention to the fact (*Annales de Pharm. Louvain*) that, on account of the acid reaction of bread, a yellow color would develop on adding the tincture of logwood, and that this color is also developed in old soured flour. If an effort be made to neutralize by the use of ammonium or sodium carbonate, the bases give a color with the tincture. Vanderplanken has found, however, that the acid present may be very safely neutralized by the addition of precipitated calcium carbonate without affecting the blue coloration developed in the presence of alum. He directs the following method of procedure: Triturate 10 to 20 gm. of bread with water to a paste; add some neutral sodium chloride, and then add 10 drops of fresh logwood tincture, and gradually add 5 drams of precipitated calcium carbonate. Now triturate the whole in a beaker glass with water sufficient to bring the volume up to 100 ccm., when, after allowing to stand for a few minutes, the supernatant liquid assumes a clear reddish violet color, but in the presence of alum the grayish blue, to a deep blue, color is developed. By this process 1 gm. of alum may be discovered in 1 kilo of bread.

**The Harmfulness of Certain Kinds of Honey.**—Olivier de Serre directs attention (*Sudd. Apoth. Zeit.*) to the fact that the honey gathered from the elms, euphorbium, arbutus and box tree produce untoward effects when eaten. Alpine honey gathered from the aconite has been known to cause poisoning in Switzerland. These observations, if correct, confirm the well-known fact that the aroma of honey is dependent upon the blossoms from which the honey is gathered. Volatile poisonous substances can, according to the author, possibly also be carried over with the honey. The aconite poisoning appears to be rather problematical.

**Preservation of Rubber Catheters.**—When rubber catheters have once become

brittle they are generally considered hopeless. Several correspondents have contributed various suggestions as to their preservation to the *Pharmaceutische Zeitung*, as follows: Rubbing from time to time with powdered talc, occasional kneading with glycerin, preservation from light, and care to keep at a uniform and moderate temperature in a stone jar upon whose bottom a little petroleum is kept. Another correspondent said that if the catheters have not become too brittle they may be again rejuvenated by treatment with glycerin. Still another correspondent makes the unusual suggestion that these or any other rubber goods may be made as good as new by maintaining them at the temperature of the body by carrying them around, laughable as it may seem, in the trousers pocket for a few days. He also recommends that a little benzine be kept in the bottom of the receptacle in which the goods are stored.

**Erodium Cicutarium a Hemostatic.**—Dr. L. V. Komorovitch has observed (*Sem. Méd.*) that *Erodium cicutarium Geraniaceae* is an excellent drug for combating metrorrhagia and menorrhagia, especially in cases due to endometritis. For this purpose he employs an infusion made with 15 gm. of the plant and 180 gm. of water, to which are added a few drops of spirit of peppermint; the dose being a tablespoonful every two hours. The drug is well tolerated, and its hemostatic action is said to be rapidly manifested, even in cases where ergotin or *hydrastis canadensis* is powerless to arrest the flow of blood.

**Saponin Emulsions.**—According to Schazki (*Pharm. Ztg.*) saponin produces permanent emulsions with very many medicinal substances. It possesses the advantage of in no wise lessening the therapeutic value of the substances emulsified, which is so often the case in emulsions prepared with acacia, egg yolk, etc.

**Alum Bougies.**—Bougies containing 12½ per cent. of alum may be made as follows (*L'Union Pharm.*): Macerate 5 parts of gelatin in 85 parts of water for a quarter of an hour; add 10 parts of glycerin; heat the whole until the gelatin is dissolved, and boil the liquid down to 40 parts. The solution and evaporation should be conducted without bringing the liquid to the boiling point, lest the congealing properties of the gelatin be impaired. To the warm mass add a hot solution of 8 parts of alum in 25 parts of water. This addition causes the gelatin to coagulate, but, on continuing the heating of the mass, it again becomes liquefied. Finally, evaporate the whole to 64 parts, and then pour into molds.

#### LEATHER DRESSING.

[Seifenfabrikant.]

	Parts.
Ceresin, yellow.....	1
Palm oil.....	1
Lard.....	6
Heavy petroleum oil.....	4 to

#### WEGSCHEIDERS LAXATIVE TEA.

[MAERHER—*Pharmaceutische Zeitung.*]

	Parts.
Liquorice root, cut.....	15.5
Althea root, cut.....	30.0
Senna leaves, cut.....	2.0
Walnut leaves, cut.....	2.0
Fennel seed, bruised.....	7.5
Linseed, bruised.....	43.0

Contributed to the  
American Druggist and Pharmaceutical Record.

## A STANDARD FOR DRUGS.\*

BY J. U. LLOYD,  
Cincinnati, Ohio.

In a former paper (*Am. Journ. Pharm.*, June, 1896) this writer called attention to one phase of this subject, a phase that he believes principally concerns the coming revision of the Pharmacopoeia. In the present paper he presents his study of the subject as he views it personally, the result being largely evolved from experiences of his acquaintances and himself.

My connection with those who make and those who dispense medicines convinces me that manufacturers and apothecaries alike do not oppose any plan that tends to prevent adulteration and sophistication or that will elevate the professional side of the apothecary's art. Neither have I seen in my interviews with the commissioner, Dr. McNeal, any personal desire to oppress or do a wrong. Hence, as one vitally concerned in assisting any honorable scheme that may tend toward peace and be conducive of good to the people and the makers and handlers of medicine, I feel that the few words that follow may, in view of the fact that I cannot meet with you this session, be of use.

That criticisms may be made concerning the Ohio law is too well known to require mention, and the same is true of those who antagonize it. Neither will it be of use now to argue over what is as it is, since present conditions, so far as legislation is concerned, cannot for a long time at least be affected or altered. The question now is not as to where the law is defective or where it can be improved, but what can be done to further harmony and justice toward dealers in drugs, toward those concerned in enforcing the law, and toward the people whom the law was intended to protect. I will not therefore consume time with the problem of revision of the law, which is of great importance for future consideration but now immaterial.

### FORMER METHODS OF THE FOOD COMMISSION.

The early method of arriving at the condition of substances on the drug market seemed to me unfair toward apothecaries. I could not see the justice in prosecuting dispensers for substances such as powdered elm, flaxseed, etc., that they bought of jobbers in good faith and sold in the condition purchased, although, as shown by the arguments of Dr. McNeal before our society, as well as in Cincinnati, he could see no way outside of this method. Hence, the substances examined have been taken from apothecaries, and until our last year's meeting the majority of the substances on which prosecutions were based were of substances which druggists purchased on the market. This seemed to me unfair, as I believe that if specimens are to be taken in this way either the wholesale dealers or the manufacturers should be made responsible for such goods as are sold to druggists ready-made, and that the specimens taken from apothecaries should be limited to preparations made by apothecaries. I agreed with all others so far as I know on this point, and at our last meeting, after you appointed me as one of the committee, I had a can-

did talk with the commissioner and presented my views clearly. He said that it was farthest from his intention to do any one a wrong or to demand impossibilities, and at his request I named the classes of substances to which I took exception, as bearing unjustly on retailers, which included nearly everything taken to the time of our last meeting.

### LIMITING VARIATION.

Of the substances for which, in my opinion, retail druggists could assume the responsibility, some were nearly permanent and others subject to change; and the attention of Dr. McNeal was called to the fact that with these pharmaceutical preparations certain limits of variation should be allowed, which limits, however, I could not attempt to define. The substances examined since show that while Dr. McNeal attempted to profit by these criticisms, which were candidly made and at which he took no offense, the results show that if apothecaries are to be made responsible for their own preparations the limit of variation from the U. S. P. requirement must be very liberally drawn unless conditions prevail very different from the present. Thus it is that mature consideration based on these several years' study induces me to urge this society to throw aside all minor objects and strive to arrange matters so that reputable pharmacists may conduct their business in confidence and endeavor to remove from those who make preparations and those who sell them the overhanging dread and fear that comes from uncertainty as to requirements.

It is evident to me that neither the commissioner nor ourselves can profit by strife and discord—it is not likely that either party wishes it—and speaking for myself I will say the worry of the last three years on behalf of my friends and myself has been greater than I can hope to stand for many years longer. It is evident that if the apothecary be made responsible for preparations that are prepared under his own supervision, even such substances as seemingly are easily made, the deviations from exact assay will be found greater than the majority of purely scientific men will deem possible, and I arrive at this conclusion from the returns that come from the preparations of apothecaries of unimpeachable integrity, in whom I have unlimited confidence.

### WHERE THE RESPONSIBILITY SHOULD REST.

As a general review, then, judging from the conditions through which we have passed, I would conclude as follows:

FIRST.—The jobber should be held responsible for substances sold to apothecaries from which pharmaceutical preparations are made or which apothecaries paying full price are entitled to protection. These substances, such as powdered drugs, definite chemicals, essential oils, etc., should not be required as a class to conform strictly to the U. S. P. tests, but a reasonable variation should be allowed in those that manufacturers cannot readily supply of strictly U. S. P. quality, and especially with such as are liable to variation by age.

SECOND.—The retailer should be responsible for such pharmaceutical prep-

arations as qualified apothecaries ought to prepare. These preparations should be judged, not by the strict wording of the Pharmacopoeia, but by limits of permissible variation. In my opinion this limit of variation should be liberal, at least for a time.

THIRD.—A committee should be appointed to determine what in our judgment should be these limits of trade standards, and as fast as they are established to their satisfaction the members of this society should be advised of the fact, and from these substances the commissioner should take his specimens for examination.\* The commissioner should be invited to become a party to this undertaking, and in my opinion the present incumbent, Dr. McNeal, or the future commissioner, whoever he may be, will gladly unite to further any plan that tends to protect innocent parties and to prevent adulteration.

FOURTH.—The delegates from this society to the American Pharmaceutical Association should be instructed to obtain the co-operation of that organization in order not only that our State official may have the benefit of their deliberations, but that the next Committee on Revision of the Pharmacopoeia may have the experience of the national organization in a new problem which they must meet in the future.

Finally, the writer believes that more good can be accomplished by cool deliberation than by hasty action. No reputable druggist desires to wrong his patrons; all are opposed to adulteration. Neither do I believe that any trouble whatever will be experienced in obtaining the co-operation of the commissioner, the American Pharmaceutical Association, and of apothecaries generally.

The writer cannot conclude this brief résumé without expressing the deep regret that engagements made a year ago prevent his presence at this meeting. While the foregoing very imperfect outline presents many defects and is blemished by many oversights, still it will serve as a nucleus for proceedings that in the judgment of the writer are necessary to the prosperity and peace of our people. This problem must be met, and as it is likely to require some years to solve it, I feel that the labor should devolve on the younger men. Hence, while I expect to do what I can in this direction, I beg that my name be left out of all committees.

### Poison of Rhus Toxicodendron.

Recent investigations quoted in the current number of *Science* establish the fact that the essential poison of rhus toxicodendron can be nothing but an oil. Hence water will not remove the poison from the surface, but alcohol will, if applied freely.

\* It will be seen from the report of our committee that steps had been taken to arrive at an understanding with Dr. McNeal concerning details of procedure in this direction.

\* Read at the 1896 meeting of the Ohio Pharmaceutical Association

### Intestinal Worms.\*

Anthelmintics are usually irritants, and in many of those diseases which simulate the verminous affection, but are distinct from it, there is already an irritated, if not an inflamed, state of the intestinal mucous membrane.

Vermifuges administered under such circumstances obviously do harm. It is thus that many lives are lost by the use of anthelmintic nostrums, which are extensively advertised and which command a ready sale, inasmuch as the belief in the presence of worms as a frequent cause of disease pervades all classes.

#### ROUND WORM.

##### *Ascaris Lumbricoides.*

℞ Ext. spigellæ fluid.....	f 5 x
Ext. sennæ fluid.....	f 5 vj
Oil anisi.....	℥ xx
Oil carl.....	℥ xx

Two or three times daily; half teaspoonful for a child of two years, and a teaspoonful for one from four to ten years old.

℞ Oil of chenopodium..... 3 ij

To be given on sugar three times daily, in doses of five drops, to a child of three years, and ten drops to one of ten years.

A cathartic should be given every second or third day.

℞ Santonin..... gr. ij  
Mild chloride of mercury..... gr. ss

Every night for two or three nights, to a child five or six years old, and followed each morning by a purgative dose of castor oil.

℞ Extr. spigellæ et sennæ..... x j  
Santonin..... gr. viij  
Teaspoonful to a child of five years.

℞ Oil chenopodii, gtt. lx vel..... f 3 j  
Pulv. acaciæ..... 3 ij  
Syrup. simp..... 5 j  
Aque cinnamonomi..... 5 ij

Give a dessertspoonful three times a day for three days, and repeat after several days.

℞ Spts. terebinth. rect..... 3 ij  
Oil limonis..... gtt. v  
Mucil. gum. acac. ss }  
Syrup. simpliciæ, ss } 3 vj  
Aque anisi..... 5 ii-ij  
One teaspoonful every six hours.

℞ Mucil. gum. acac..... 5 ij  
Sacch. alb..... 3 x  
Spts. æther. nitr..... 3 iiij  
Spts. terebinth. rect..... 3 iiij  
Magnes. calcinat..... 5 j  
Aque menthæ..... 5 j  
Dose—One teaspoonful.

The tænicide should be given after fasting and followed in an hour by a cathartic to carry off the worm. The best tænicides are pomegranate or its alkaloid, pelletierine; felix mas; kousso; pumpkin-seed; turpentine, and cocoa-nut.

#### TAPE WORM.

##### *Tænia.*

℞ Oleoresinæ aspidii..... 3 j  
Tinct. quillaiæ..... f 3 ss  
Tinct. aurantii dulcis..... f 3 j  
Syr. aurantii, q. s. ad..... f 3 vj  
For a child five years old. Dose not stated.

℞ Tannate of pelletierine..... 3 ss  
For a child three to five years old.

℞ Oil terebinthine..... 3 j  
Oil ricini..... 3 ss  
Take in one dose.

Since entire expulsion of the tape-worm is effected with difficulty, preparatory treatment for about 48 hours

should be employed before the vermifuge is administered. During this time the patient should take a mild purgative once or twice, and such food, in moderate quantity, should be allowed as leaves little residuum, as beef-tea, etc., with some stimulant if the patient feels exhausted. There are three articles of food which experience has shown to be especially useful in this preparatory treatment, perhaps from a sickening effect which they produce upon the worm—namely, salt herrings, onions and garlic. They may, therefore, be taken as food in the 12 or 18 hours preceding the employment of the vermifuge, which is ordinarily most convenient to administer in the morning.

#### PIN WORM, THREAD WORM, SEAT WORM.

##### *Oxyuris Vermicularis.*

℞ Magnesii sulphatis..... 3 iv  
Syrup. rubi idæi..... f 5 ij

A tablespoonful two or three days in the week, to be preceded by santonin, spigelia, or chenopodium. Once a day a high enema of soapy water should be given; and the folds of the anus should be carefully scrubbed with soap and water, and the following ointment applied:

℞ Acidi borici..... 3 j  
Oil rose..... gtt. ii  
Vaseline..... 3 j  
Apply externally.

Thread worms are most effectually and easily removed by the use of enemata. For this purpose, lime water, or an infusion of quassia, or a solution of common salt (a teaspoonful to 4 ounces of water) may be employed. In using these agents the bowel should first be cleared out by a copious injection of warm water. Jacobi recommends a decoction of garlic as an enema in these cases.

℞ Santonin..... gr. j  
Compound liquorice powder..... 3 j  
Nightly for a child four years old.

### Liquefactive Incompatibilities.

Prof. E. A. Ruddiman has given, in the *Southern Journal of Pharmacy*, a table of the solid substances which when triturated together produce liquids, due either to the formation of new compounds, or of hygroscopic mixtures. He finds that the following produce a pasty mass or a liquid, when triturated together in equal quantities:

*Acetanilid* with phenol, resorcin and thymol. A damp powder results with chloral, which dries on standing.

*Antipyrin* with beta-naphthol, phenol, resorcin, thymol, urethane, pyrogallol, and salol.

*Beta-Naphthol* with antipyrin, camphor, exalgine, menthol, phenol, and urethane.

*Camphor* with beta-naphthol, chloral, menthol, phenol, pyrogallol, resorcin, salol, thymol and urethane.

*Camphor, monobromated*, with chloral, phenol, salol and thymol.

*Chloral (hydrate of)* with camphor and monobromated camphor, exalgine, menthol, methacetin, phenacetin, phenol, salol, thymol and urethane. A damp powder is obtained with acetanilid, which dries on standing.

*Exalgine* with beta-naphthol, chloral, menthol, phenol, pyrogallol, resorcin, salicylic acid, salol, thymol and urethane.

*Menthol* with beta naphthol, camphor, chloral, exalgine, phenol, pyrogallol, resin, resorcin, thymol and urethane.

*Methacetin* with chloral and phenol. A

damp powder results with resorcin, which dries on standing.

*Naphthalin* with phenol and salol.

*Phenacetin* with chloral and phenol.

*Phenol* with all in this list except salicylic acid.

*Pyrogallol* with camphor, exalgine, menthol, phenol and urethane. A pasty mass, which dries on standing, results with antipyrin.

*Resin* with menthol and phenol, and gives pasty masses with salol, thymol and urethane.

*Resorcin* with acetanilid, antipyrin, camphor, exalgine, menthol, phenol and urethane. With methacetin a damp powder, which dries on standing.

*Salicylic acid* with exalgine and urethane.

*Salol* with camphor, monobromated camphor, chloral, exalgine, naphthalin, phenol, resin, thymol and urethane. With antipyrin, a damp powder which dries.

*Thymol* with acetanilid, antipyrin, camphor, monobromated camphor, chloral, exalgine, menthol, phenol, resin, salol and urethane.

*Urethane* with antipyrin, beta-naphthol, camphor, chloral, exalgine, menthol, phenol, pyrogallol, resin, resorcin, salicylic acid, salol, and thymol.

*Sodium salicylate* he finds not to become pasty with antipyrin, as stated by some.

### Recovery of Silver and Gold from Photographic Residues.

We take the following directions from an original contribution made by Weidert to the *Neueste Erfindungen und Erfahrungen*: Analysis of finished photographs shows that only a very small portion of the gold and silver used in their preparation remain in the finished print, by far the greater portion of the metals being retained in the baths.

The methods of recovery of silver residues vary with their character. The silver from old fixing baths can be recovered in the simplest manner. By hanging strips of copper or zinc in the baths the silver will be deposited on the strips in a grayish black powder or in small leaflets of a metallic luster. This method, however, is tedious and extravagant, since a large portion of the silver remains in this solution. A somewhat better method is to agitate the bath after the addition of zinc dust, and then filter off the precipitate, wash, and then treat with diluted sulphuric or hydrochloric acid in order to dissolve out the valueless zinc. This process also is not particularly to be commended.

It is generally customary to precipitate the silver with an aqueous solution of potassium sulphide, and drain the brownish black sulphide of silver on a muslin filter and dry it. In order to reduce this to silver it is fused with calcined soda in a porcelain or graphite crucible and poured upon an iron or marble slab.

The sulphide of silver can also be roasted in the atmosphere, then mixed with 8 or 4 parts of potassium nitrate and introduced carefully in small portions into a glowing crucible.

In order to recover the silver from the paper clippings, etc., which have not been "fixed," the paper residue should be cut into small pieces and put for two hours into a bottle where the old fixing bath is kept. This bath is then filtered and treated as above directed.

Since all photographic silver paper contains, in addition to the silver chlo-

\* From *Pediatrics*.



ride, easily soluble silver nitrate, the first wash water from the toning in particular should be collected and the silver precipitated by the addition of hydrochloric acid and sodium chloride. After drying this should be reduced in the same manner as the silver sulphide, by the means of potassium or sodium nitrate. One may also pour over this precipitate a 5 per cent. solution of hydrochloric or sulphuric acid, and then hang in the solution a piece of zinc, whereupon the silver is thrown down in the metallic form.

Gold is generally precipitated from the baths by addition of hydrochloric acid and a solution of ferrous sulphate. The gold is thrown down as a brownish red powder, which should be washed well and fused. Occasionally ammonium chloride is added in excess to the toning bath with some hydrochloric acid. The gold then precipitates out after a short time (if in a warm place and particularly in light) in the form of metallic glistening scales.

### Influence of Law Upon Pharmacy.

By O. P. SYDENSTRICKER,

President of the West Virginia Board of Pharmacy.

At the last meeting of the West Virginia Board of Pharmacy, on May 7, the board was entertained by the Wheeling Association of Druggists, and after the dinner, which formed part of the entertainment, President P. Sydenstricker of Lewisburg made an address, a portion of which was as follows:

Theoretical devotees of your profession will argue that the tendency of your labors should involve close study and minute attention to scientific pharmacy. They will constantly advise a discussion of the ways and means by which may be accomplished a steady evolution to what is distinctively termed true pharmacy. They will present to you arguments that the only salvable portion of your labors should be attended with an earnest effort to develop and expand the scientific aspects of the retail druggists' occupation, and that no other course will accrue to the legitimate object of your organization or save pharmacy from disrepute and extinction.

#### WILL THERE BE A SEPARATION OF PHARMACISTS INTO CLASSES?

It may be contended also that the true pharmacist should not become a specially interested party in the prevailing struggle for control or supremacy in commercial relations, and that there must be a separation of the more common and vulgar traffics from legitimate pharmacy, and that all such ordinary items of trade as those covered by the general term of merchandise should be ignored in favor of strict attention to the steady development of a scientific base. While these may be the counsels of extremists, and from certain standpoints may become worthy of mature consideration, and may subserve worthy purposes and much ultimate success in maintaining for the pharmacist a most desirable and indeed an enviable position among his fellow men, yet the great question of physical wants and human dependencies—the promotion of commercial and financial relations which have become absolutely necessary to our very existence—cannot be ignored; hence we are forced into

this business maelstrom, and from which we cannot escape.

#### THE ELEVATION OF PHARMACY.

It must, however, be altogether evident to all druggists that an attentive study of the finer arts and of the ruling sciences which form the basis of the principles of pharmacy, a devotion to all those researches which have for their object a more mature education of those engaged in pharmacy, and above all the creation of a fondness for and a peculiar adaptation to the honorable and useful labor of the pharmacist—all these become necessary as a means of elevating the pharmacist to such consideration as his profession deserves.

And it must also become a voluntary concession on the part of all that if the standard of education in the pharmaceutical profession be elevated to that plane which will command the respect and confidence of the intelligent public, then will the pharmacist force himself into a position which neither the public nor the medical profession can ignore, and both will just as surely avail themselves of his professional abilities and to such an extent as will make them both remunerative and honorable.

#### BUSINESS ACUMEN AND SCIENTIFIC ABILITY NOT INCOMPATIBLE.

While we may be justified in naming these conditions as a large part and parcel of the essentials necessary to be combined in the pharmacist, yet we see no reason why the liberal educational advantages he possesses should not make his mental abilities sufficiently elastic and serviceable to enable him to grasp and control the commercial intricacies which confront him in his business career. We all know the magnitude of these business troubles, but I cannot understand why such grave incompatibilities should exist between the scientific and the business relations of the druggist as to make him competent for the functions of one and incompetent for the other. On the contrary, I see ample reason, if fully equipped for the more delicate work of the scientist, that he should develop from this condition to that of a formidable antagonist in commercial aspirations.

#### THE PROPER PROPORTION OF SCIENCE AND COMMERCE.

Just here we are appealed to for the crowning discrimination of our lives, in bringing about such a neutrality between traffic and science as will render our labors effective both to ourselves and to our profession; to evade such commercial environments as will wholly absorb our time and attention, and at the same time to devote such study to our mental and professional development as will elevate our profession to its right and proper plane. Our own personal solution of this problem has continually been directed in the channel of better education for the pharmacist, the foundation of which should be a mature academic accomplishment as a basis, and followed by a thorough study of those sciences which are largely contributory to pharmacy. Following this it has been my constant aim as a commissioner of pharmacy to impress upon our board the importance of using such examination questions as will reveal to us as accurate an idea as possible of the knowledge the applicant may possess of the true principles of pharmacy, both as an art and as a science, as well as his knowledge of their practical uses and application.

#### HIGHER ACADEMIC STANDARD NEEDED

Our law is most inefficient in not requiring any general or specific standard of academic culture, and this omission becomes one of the greatest stumbling blocks to the progression of pharmacy in our State. The preliminary or academic training which should become obligatory upon those who aspire to become first-class pharmacists should be equivalent to that generally required for graduation by our standard high schools, embracing such a knowledge of Latin as will make all the uses and applications of that language in the Pharmacopoeias and other texts easy and familiar to them. No progress can be looked for unless such foundation has been laid, and we think it should be made a legal obligation on all boards of Pharmacy that they should reject every candidate for examination whose papers disclose illiteracy.

#### FAULTS IN THE LAW.

One other great defect in our pharmacy law exists in its failure to discriminate definitely and fairly as to the extent to which grocers and general dealers may infringe upon the druggists' business in the sale of certain drugs and patents. As the druggist is specially licensed and at considerable trouble and expense for the work of handling drugs and medicines, we think it but proper and fair that he should be legally placed in charge of all of it to the exclusion of all general dealers. We have at different times inaugurated some efforts before our legislature for the correction of these and some other defects in the pharmacy law, but, finding that any action looking to re-enactment of such sections as we thought should be changed would lead also to motions for other changes which we feared would make the law more objectionable than it now is, we were thus admonished to "rather bear those ills we have than fly to others that we know not of."

#### IMPROVEMENT UNDER THE LAW.

Now, as a representative of our Board of Pharmacy, I beg to note that, notwithstanding great lack of facilities, limited pecuniary means, an imperfect law, failure of local prosecuting officers to render us such aid and support as the law contemplates, and inability on the part of members of the board to visit remote localities and personally attend to the suppression of local abuses, yet we claim that much material advancement in pharmacy has been made within our State since the law was enacted, and especially consequent upon recent efforts, revised rules and such stringent regulations as former experience, together with a close study of the modes of boards of other States, have prompted us to inaugurate.

#### EXPERIENCE BEFORE EXAMINATION.

One of our chief reliances for this progression has been our positive and iron clad rule requiring two years' practical experience as an essential for examination, thus forcing upon the applicant at least a degree of skill and method while he is also storing his mind with the scientific principles necessary to develop such practice to an intelligent use and a pleasing and wholesome application. Manual dexterity alone is always hailed as an accomplishment, but with a fair understanding of the scientific principles involved it must become a positive pleasure to the exponent.

## Allspice, or Pimento.\*

By J. CH. SAWER, F.L.S.

The name "allspice" is given to the dried, unripe berries of the *Eugenia pimenta*, De Cand., by reason of their aroma and flavor, which are considered to resemble a mixture of cinnamon, cloves and nutmegs.

This handsome evergreen tree is indigenous to the West Indies, and is found on calcareous soil near the coast, on the islands of Cuba, Hayti, Trinidad, Domingo, Antigua, all through the Leeward and Windward Islands, and more or less in all the islands of the Caribbean, but is most abundant in Jamaica: the groves of this spice tree found there are magnificent, and produce more than one half of the allspice used in the United States. It is also found in Central America, Mexico, Venezuela and Costa Rica.

The usual height of the tree is from 20 to 30 feet; occasionally it exceeds 40 feet. The trunk is slender, straight and upright, much branched at the top, and covered with a smooth, gray, aromatic bark. The leaves are from 4 to 6 inches long, and are very aromatic in the fresh state, abounding in essential oil.

## WHERE PIMENTO IS CULTIVATED.

The pimento tree is particularly fond of a white marly or chalky soil having a shallow surface of mold, and therefore thrives on rocky lands which are fit for little else. Strictly speaking, the pimento tree is not really cultivated at all in Jamaica. The trees are found in greater or less numbers all over the island; but in some sections of the country they are the predominating trees, indigenous and growing wild. The nearest approach to their cultivation in these localities is to clear away the underwood and keep the groves free from brushwood and creepers—a difficult task where everything grows spontaneously in the wildest luxuriance. Sometimes the trees will be found singly, sometimes in groups of 6, 12 or 20. In other places a few hundred will be found; while in ten principal pimento districts in parishes of Manchester, above Kingston, and St. Ann's, there are great forests of pimento trees. These last named mountainous districts are some 6000 feet above the sea level; there the harvest is gathered later than in the low lying districts near the coast.

When a plantation of pimento is laid down, the trees begin to fructify in the third year, and arrive at maturity in seven years, when they abundantly repay the patience of the planter.

## GATHERING THE BERRIES.

In the month of July the head of the tree is covered with an exuberance of branches of very small, greenish white, fragrant flowers. The fruit is a smooth, shining, succulent berry of a black or dark purple color when ripe, and containing two kidney shaped, flattish seeds. When ripe, it is filled with a sweet pulp, and the aromatic property which so strongly characterizes it in the unripe state, has, in a great measure, disappeared. The gathering of the berries therefore takes place as soon as they have reached their full size and while still green, because if the fruit is allowed to ripen on the tree it is of no commercial value. A problem which faces the pimento producer is, therefore, the rapid picking of the berries when they are just

fully grown. It is often difficult to secure enough help among the indolent natives to pick the crop. A recent instance is known of a producer losing fully 8,000 bags of his pimento, which had ripened and fallen to the ground simply because he could get no one to pick it.

The berries are gathered by hand, and for such as cannot be reached by climbing, recourse is had to ladders. The small twigs bearing the bunches of berries are broken off and brought down. During the first and second days they are often turned to be fully exposed to the sun. When they begin to dry they are frequently winnowed to remove the stalks, and are laid in cloths to preserve them from rain and dews, still being exposed to the sun every day and removed under cover every evening until the fruit is sufficiently dry, which usually happens in 12 days, and is known by its having acquired a reddish brown color, also by the rattling of the seeds. Some planters kiln dry the berries, especially when the crop is abundant, security against rain being essential. After the drying process is completed the pimento is packed in bags, very much in the same way as coffee, and transported to the coast for shipment. In Jamaica the principal port of shipment is Kingston, but large quantities of the crop are shipped from various other ports along the coast.

## YIELD OF OIL FROM DRIED BERRIES.

In the dried state pimento is a small, dry, roundish fruit, varying somewhat in diameter, but on an average about the size of a small pea. It is crowned with the remains of the calyx, usually in the form of a slightly elevated scar like ring, and, rarely, at the other extremity of the fruit there is a short stalk attached. The berry consists of a brittle, somewhat woody shell or pericarp, externally dark brown, and more or less rough on its inner surface from the presence of small oil receptacles, and of two dark brownish black, somewhat compressed, kidney shaped seeds, each contained in a separate cell. The aromatic properties are more evident in the shell than in the seed. The berries yield, on distillation, 8 to 4½ per cent. of a volatile oil, which is a little heavier than water, having a specific gravity of 1.04 to 1.05 at 15 degrees C. Pimento is sometimes adulterated with a Mexican spice called "Pimenta de Tobasco," which is a larger berry and less aromatic; it is produced by the *Myrtus tobasco* (Mocino), a native of the hot regions in Mexico, and is considered to be a variety of the true pimento tree.

Another tree, as variable as *Eugenia pimenta*, and yielding analogous products, is *Myrcia pimentoides*, D.C.; it is a native of the West Indies, and is now cultivated in the East Indies. Its leaves, berries, and flower buds have a not taste and fragrant smell like those of *Myrcia acris*, from which the West Indian "Bay" leaves have long been considered to be produced.

## WILD ALLSPICE.

During the American war, when allspice was difficult to obtain in the United States, a substitute was found in the berries of *Laurus benzoin*, Linn., commonly known as "Wild Allspice, Spice bush, Fever Wood, Benjamin Bush, and Spice-bush" (not the Californian "Spice-bush"). Growing to a height of 10 or 12 feet, this bush bears an aromatic fruit of about the size of an average olive, bright red, and in clusters. These fruits con-

tain nearly 33 per cent. of a thick fixed oil, of about the consistence of castor oil, greenish brown in color and of a pungent, aromatic taste, which is due to an abundance of volatile oil also contained in the fruit; the amount has been estimated at from 4 to 5 per cent. All parts of the shrub possess pleasant aromatic odors, which, however, are strikingly different from one another, the essential oil of the bark being something like wintergreen and that from the twigs like camphor and calamus; while the leaves smell very pleasantly of lavender.

## Preparation of Glycerophosphates.

Dr. G. Delage describes, in *Les Nouveaux Remèdes*, a more rapid method of preparing glycerophosphate of lime than Porte and Prunier's method, which takes several days to complete. Delage's method can be finished in a few hours. It is as follows: Put into a suitable flask 100 gm. of 60 per cent. phosphoric acid and 150 gm. of glycerin. Fix a double perforated cork into the flask, one hole with a thermometer in it, the other with a safety tube as a vent. Then heat with a Bunsen over gauze. The mixture begins to boil at 120 degrees C., and turns slightly pale, darkening until 160 degrees is reached, and between that and 190 degrees it becomes dark brown, syrupy, and gives off acrolein vapor. The heat is then removed and the mixture allowed to cool, when it becomes viscous. Next the mass is mixed, about 80 gm. at a time, with a chalk mixture (50 gm. of precipitated chalk to 250 ccm. of water), the mixture well stirred to promote effervescence, and at the end of six hours it is filtered. The filtrate is a solution of calcium glycerophosphate, which is precipitated by the addition of alcohol, is collected, dried partially with bibulous paper, and finally over sulphuric acid in a bell-jar.

Dr. Delage discusses the chemistry of physical properties of the glycerophosphates, then takes up the pharmacy part of the subject, strongly deprecating hypodermic administration as causing much pain. The doses given are of the soda, lime, potash, and magnesia salts 5 to 15 grains per day, and of the iron salt 8 to 5 grains per day. The following formulæ give excellent preparations for those suffering from nervous troubles:

Glycerophosphate of lime.....	3 iss
Glycerophosphate of soda, potash, magnesia and iron, of each.....	3 ss
Tincture of Ignatia.....	3 ss
Pepsin.....	gr. 45
Diastase.....	gr. xv
Tincture of orange.....	3 iij
Syrup of cherries to.....	3 vj

## Mix and filter.

Dose: A dessertspoonful to a table-spoonful twice daily at meal time.

For a cachet the following is the prescription:

Glycerophosphate of lime.....	gr. v
Glycerophosphate of magnesia.....	gr. iss
Glycerophosphate of iron.....	gr. ½
Powdered nux vomica.....	gr. ss
Pepsin.....	gr. iss
Diastase.....	gr. ½

This mixture to fill one cachet. A cachet to be taken twice daily, at meal times.

The most characteristic reactions of the glycerophosphates are the immediate precipitate with ammonium molybdate, a precipitate with silver nitrate soluble in excess of water, and a white precipitate with lead acetate soluble in acetic acid.

\* Imperial Institute Journal.



We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of any unusual compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the labels used on packages of the compound should also be sent.

**Cepacaballo (Bathurst Burr).—H. A. S.** asks for information in regard to this herb, which he says is mentioned in an article by Chas. Ledger in our issue of March 25. Our correspondent wishes to know if it is procurable in the American market.

**Seiler's Solution and H. O.<sub>2</sub>.—T. P. A. K.** asks us to comment on a prescription which calls for:

Seiler's solution..... § j  
Hydrogen dioxide..... § iv

We do not see anything amiss about this prescription. Seiler's solution, the first article called for, has the following composition:

*Seiler's Solution.*

Thymol } aa..... gr. x  
Eucalyptol } aa..... gr. v  
Menthol..... gr. v  
Oil gaultheria..... gtt. vj  
Sodium benzoate } aa..... ʒ j  
Sodium borate } aa..... ʒ j  
Sodium salicylate } aa..... ʒ j  
Glycerin..... fl. ʒ ss  
Alcohol..... fl. ʒ j  
Water, sufficient to make..... fl. ʒ viij

The addition of 1 fluid ounce of such a solution to 4 fluid ounces of hydrogen dioxide should not make any trouble. If our correspondent has observed any peculiar reaction arising from the mixture we should like him to make it known.

**Candy Cough Drops.—J. A. W.**—The following is a fair type of the formula desired:

Infusion of horehound..... 2 pints  
Fld. extract squill, alc..... 4 ounces  
Fld. ext. grindelia..... 2 ounces  
Confectioners' or brown sugar..... 10 pounds  
Glucose..... 2 pounds  
Caramel, sufficient to color.  
Water..... 2 to 3 pints

Bring the sugar and water to a boil; add the infusion of the horehound, the glucose and the remainder of the ingredients and boil again. Continue the boiling until portion taken out and dropped into water immediately becomes brittle, when the mass is poured upon a greased marble slab, rolled out to an even thickness and cut into the desired shape with a knife. The druggist will, however, effect a considerable saving in labor by handing the ingredients of the candy to the nearest confectioner, with instructions to prepare them into candy form.

**Keeley's Liquor Cure.—H. M. F.** asks for particulars regarding the Keeley treatment of habitual drunkards.

A correspondent of the *Medical News*, in the issue of February 11, 1898, says that patients on entering the Keeley cure institute are given a mixture containing:

Auril et sodii chloridi..... ʒ ss  
Strychnine nitratis..... gr. iv  
Atropine sulphatis..... gr. j  
Glycerini..... ʒ ij  
Ext. fld. cinchonae, q.s..... ʒ xv

Sig.—One teaspoonful in water three times a day.

The patients report four times a day and receive a hypodermatic injection of strychnine nitrate, 1-60 grain. They are told they can have all the liquor they want. But—and here is the secret—if the patient asks for a drink of whisky he gets it, and with it an injection of apomorphine, 1-10 grain. Of course the whisky makes him sick, and he is convinced that he cannot any longer retain his favorite beverage.

**Dr. Channcey F. Chapman**, in the *Chicago Medical Recorder* of February, 1898, gives the following formula, and vouches for their correctness:

**No. 1. Tonic.** Known in the institute as the "dope":

Auril et sodii chloridi..... gr. xij  
Strychnine nitratis..... gr. j  
Atropine sulphatis..... gr. ʒ  
Ammonii muriatis..... gr. v  
Aloin..... gr. j  
Hydrastinin..... gr. i  
Glycerin..... ʒ j  
Ext. fld. cinchon. comp..... ʒ ij  
Ext. fld. cocae..... ʒ ij  
Aque dest..... ʒ j

Sig.—One dram at 7, 9, 11 a.m.; at 1, 3, 5, 7, 9 p.m.

**No. 2. The injection** known in the institute as the "shot":

Strychnine nitratis..... gr. ʒ ʒ/10  
Aque dest., ad..... ʒ iv  
Potass. permang., q.s. to color.

Sig.—Begin with gtt. 5, which equal 1-4 grain, and increase 1 drop at each injection until the physiologic effect is produced. Four hypodermatic injections to be given daily, beginning at 8 a.m., then at 12 m., 4 p.m. and 8 p.m.

**No. 3. Used with No. 2.**

Auril et sodii chloridi..... gr. ʒ ʒ/4  
Aque dest., ad..... ʒ iv

Sig.—Gtt. 8, every four hours, in combination with the strychnine solution for the first four days. The occasional substitution of a solution of apomorphine for No. 3, while the patient is allowed to

drink whisky, constitutes the trick which gives patients a temporary disgust for liquor.

**Oil of Swallow.—M. A. H.**—This is a synonym for oil of elder and is made as follows:

Fresh elder leaves..... 1 pound  
Olive oil..... 1 quart

Boil until the leaves are crisp; press out and let settle.

**Smelling Salts.—H. F.**—There is an endless number of formulas in circulation for perfumed salts. The most satisfactory, in our opinion, consists of the simple addition of an ammoniated solution of perfume oils to some crystals of potassium sulphate contained in a suitable container. The following, from Askinson's excellent work on "Perfumes and Their Preparation," is a fair type of this class of preparations:

Oil of bergamot..... 24 grains  
Oil of lavender..... 45 grains  
Oil of mace..... 24 grains  
Oil of clove..... 24 grains  
Oil of rosemary..... 45 grains  
Water of ammonia..... 1 quart

The aromatics are placed in a bottle, the ammonia is added and the bottle vigorously shaken; the solution is soon effected and the turbid liquid can be at once filled into bottles. As a rule the bottles are filled with indifferent porous substances, such as crystals of potassium sulphate or small pieces of pumice.

Preston salt is a more permanent perfume, ammonia being constantly generated. The salt is prepared by mixing ammonium chloride in fine powder with freshly slaked lime. Fine or cheap perfume is added, according to the grade desired.

**Peptonates of Iron and Manganese.—H. H. B.**—We are unable to give you a satisfactory formula for solutions of the peptonates. These compounds are extremely unstable and it is doubtful whether any of the preparations on the market are true solutions of the salts they are claimed to represent.

**Quantities in a B.—F. D. B.** writes: "Will you kindly let me know how many ounces the finished mixture should measure by the accompanying prescription—whether a 2 ounce or a 4 ounce mixture is intended? The prescription reads:

Tinct. buchu..... ʒ ss  
Sodii bicarb..... ʒ j  
Morphin. sulphatis..... gr. j  
Spt. ether nit..... ʒ ss  
Syrupl..... ʒ j  
Aque ʒ ss q.s..... ʒ ij

Sig.—3 j t. i. d.

The prescription lacks definitiveness, though a 2-ounce mixture is evidently intended. The word *ad* after *q. s.* would provide for a 2-ounce mixture beyond a doubt, while the word *adde*, or its contraction, *ad.*, would signify that a 3-ounce mixture was wanted. We would send it out as a 2-ounce mixture.

**Thompson's Emulsion of Linseed Oil.—T. R. S.**—The formula devised by Dr. W. H. Thompson is as follows:

Irish moss..... 3 lbs  
Water..... ʒ j

[ Boil and strain; then add:

Linseed oil..... ʒ v  
Glycerin..... ʒ ij  
Simple syrup..... ʒ ij  
Wintergreen oil } aa..... ʒ xj  
Cinnamon oil } aa..... ʒ xj  
Diluted hydrocyanic acid..... ʒ xj

Make an emulsion after the usual method.

**The Manufacture of Vanilla Extract.**—C. W. D.—There is really nothing new to say concerning methods for the preparation of vanilla extracts. The compound essence of vanillin of the National Formulary furnishes an article which finds great favor with all who have used it, and it is, perhaps, the most satisfactory of all the preparations of this class which provides for the use of synthetic vanillin. The *National Druggist* of St. Louis recently published the following formulas for preparing three grades of vanilla essences, translated from the *Zeitschrift für Kohlensäure Industrie*:

	I.	Parts.
Vanillin.....	20	
Absolute alcohol.....	600	
Water.....	450	

Dissolve the vanillin in the alcohol and add the water.

	II.	Parts.
Musk.....	1	
Potassium carbonate.....	1	
Vanilla beans.....	60	
Boiling water.....	240	
Alcohol.....	720	

Mix the vanilla, cut fine, the musk and potassium salt, and pour over them the boiling water. Let stand until quite cold, then add the alcohol and set aside for 14 days. Finally strain, express and filter the colate.

	III.	Parts.
Vanilla in fine bits.....	250	
Alcohol.....	2500	
Water.....	1500	

Mix the alcohol and water and pour one-third of the mixture over the cut beans. Put into a vessel with a tight cover, place in the water bath and keep for one hour at 60 degrees C. Pour off the liquid and set aside. To the residue in the vessel add one-half of the remaining alcohol and water, and treat in the same manner. Repeat the operation with the remainder of the liquid. Remove the vanilla to an extraction apparatus, pack and extract with 250 parts of alcohol and water mixed in the proportion indicated above. Mix the results of the three infusions, filter, and wash the filter with the result of the percolation, allowing the percolate to run through and mingle with the original filtrate.

To prepare a syrup with either of these essences, mix 15 parts of the essence, eight parts of caramel solution and 4500 parts of the syrup, in which 15 parts of gelatin have been previously dissolved by the aid of gentle heat.

## Correspondence.

### Flower Farming in America.

**Editor AMERICAN DRUGGIST:**

SIR: I have read with interest Mr. Lodian's first article on the "Perfume Industry in Australia."

For the past two years I have worked along the same line with what flowers were at my command here in Michigan. I am sending under separate cover a small sample of the extract of sweet peas—a sample extract from the flowers which I grew last season. I find them immensely productive and am confident an essence and pomade from them would find a ready market. In many bouquets I believe it is superior to orange flowers, especially where the latter is used to produce certain of the different rose odors.

With mignonette I have been equally successful.

I also send an extract from *cra bapple* blossom and a combination of an extract from wild plum.

Please remember that I have every difficulty and no advantage to work under in making these. The extracts are not of good strength, but will, I think, show something of the possibilities.

Roses I have not been able to secure in quantities large enough for good trial. We have many native and valuable flowers in the United States, as, for instance, the wild white lupine of California, which, we are told, so closely resembles the orange flowers and literally covers the desert lands of Southern California.

Here there is a gold mine awaiting some one.

In the moon flowers (*Ipomoea noctiflora*) we have a rival for Ylang Ylang. It is true that this is a semi tropical plant, but I have grown it here, and for weeks the vine would bring forth each night from 40 to 60 pure white blossoms 5 inches across and of a most exquisite sweetness resembling Ylang Ylang.

I trust Mr. Lodian's article will awaken widespread interest in this too long neglected subject.

I shall await his coming articles with interest.

BRADLEY, MICH.

### A Warning to Purchasers of Proprietary Goods.

**Editor AMERICAN DRUGGIST:**

SIR: I think it my duty to sound a note of warning to your readers in regard to some very questionable methods of doing business and making sales of goods which are now being carried on in Vermont by G. G. Green, the German Syrup and August Flower man of Woodbury, N. J. They have had agents in Vermont, who have been soliciting orders on the strength of large newspaper advertising contracts.

Their smooth-tongued representative will tell you that contracts to the amount of \$350 have been consummated by his house, and in some instances he has been known to make verbal contracts with local papers, on the strength of which he secures orders. In addition to this, he displays a photograph of an elaborate thermometer, said to cost in large quantities \$8 apiece, which is given with your first order, including an ample supply of 1896 almanacs and envelopes with your imprint. You are required to sign an order, of which you have a copy, on which reads, "This order must specify on its face or back all special agreements or promises made by the agent to purchaser," and these orders are turned in to a jobber. He specifies on back of order, "Thermometer, almanacs, envelopes." The thermometer and a few envelopes are received with goods, and a promise to send almanacs later. The thermometer is worthless, and Mr. Green, on inquiry, informs you that "No promises of newspaper advertising are specified on contract, and he will expect you to pay the bill when due."

To my knowledge, many druggists in this section of Vermont, including myself, have been sold. Up to date (order given in December) no almanacs have been mailed. The promise of large advertising contracts is verbal only (not specified, you will notice) and denied by the house. You are left with a stock of stuff to get rid of as best you may. Deeming it my duty, as well as privilege, to warn those not as yet "taken in," I have chosen your valuable journal to expose the glaring imposition.

W. S. NAY.

UNDERHILL, VT.

[We are also in receipt of letters of somewhat similar tenor from O. B. Williams of Jericho; J. S. Rogers, with R. Brust, Cambridge; Kendrick & Co., Barre; A. C. Randall, St. Johnsbury, and other well known Vermont druggists. The matter is commented upon in our editorial columns.—Ed.]

### The National Formulary.

**Editor AMERICAN DRUGGIST:**

SIR: In the editorial on the National Formulary, you hit the mark when you ask if it is not the object of this work to provide practical formulae for rational preparations to replace the multitude of proprietary and semi-proprietary preparations now so extensively prescribed.

If that is not a prime object of the work, the compilers of the first edition failed to make themselves understood and failed to preserve the object of its forerunner, the New York and Brooklyn Formulary.

Is it possible that this excellent work is destined from neglect and change of policy to become a repertory of useless and fossiliferous formulae?

Believing that this is an ultimate outcome of the work as it stands to-day, and being deeply interested in its welfare, I am prompted to come before you in its behalf.

Recognizing the magnitude of the undertaking before the Committee of Revisers and praising their painstaking work, I beg to express sincere appreciation for what they have done.

Their having many calls for formulae for preparations now proprietary shows clearly that the pharmacists at large understand the object of the work and were asking for what it should contain. As the committee felt it not their place to undertake this task, I beg to suggest that the pharmaceutical journals unite in this cause.

Let them call upon every pharmacist to submit whatever formulae of this class he may have, with remarks and suggestions as to others wanted.

Let all this pass to a competent committee appointed by the journals, this committee to verify by preparation each formula, and frequently publish their results in the journals participating in the movement.

Urge the pharmacists at large to give these revised formulae faithful trial, and submit remarks and suggestions in regard to them, these suggestions to go before the committee, who may, if deemed advantageous, issue a revised formula.

By this method a series of tested formulae can be devised to meet the requirements of the occasion and incorporating the ideas and experience of the best men of the land.

The book will not be stupendous, the cost will be small and the results should be incorporated as a part of the National Formulary.

If you will organize this movement I will start the list by submitting 25 or more tested rational formulae for proprietary preparations, which I have had to devise in order to eradicate such products from our institution. I will also gladly aid in whatever manner my duties will permit.

Very respectfully,

SIDNEY RAUSCHENBERG.

NEW YORK HOSPITAL, West 16th street, New York, June 16, 1896.



## Advertising Aid. How, when, and where to Advertise

PRACTICAL HINTS AND SUGGESTIONS. CRITICISM AND CONSTRUCTION OF ADVERTISEMENTS.

In Charge of Ulysses G. Flanning.

The department editor will be pleased to criticize any advertisements submitted and to suggest improvements. Questions answered and advice given. Our readers are cordially invited to avail themselves of this help.

Electrotypes of any three of the cuts published in this series will be furnished for \$1.00. Order by numbers.

### MAKE ADS. READABLE.

**Y**OU have laid the foundation for successful advertising when you contrive to make your ads. readable. Perhaps this is one of the hardest things to learn, and yet it is not very difficult. It depends more on having something to say than on literary knack. Expression is less valuable than the easily cultivated faculty of discerning what interests people.

#### THE QUESTION OF DISPLAY.

When your ads. are readable, you have a continually widening audience that finds your space one of the attractive features of the paper. As soon as your ads. become widely read, you rid yourself of the necessity of making unusual efforts to attract attention. The question of display becomes of little or no importance; whatever you say is bound to receive attention.

#### ON FORCING RESULTS.

In advertising a drug store I do not greatly believe in forcing results, or adopting the methods that might win for a department or dry goods store. In truth, the best trade that any store has is not dragged in by startling offers or unusual bargains. The real, vital, sustaining business comes gradually through the cumulative force of your advertising. It is won more by the character of your announcements than by anything else. The qualities win in ads. that win in personal contact. Your best friends are not the chance acquaintances of an hour, but rather those who have been attracted to you by the gradually revealed traits of your character. If your ads. are readable and sustain the interest; if they are honest, sincere and newsworthy; if they are good humored, earnest and never mercenary, they will in time weave a web of conviction about their readers

from which there will be no escape. When you win trade by perfectly straightforward methods, it comes to stay.

#### A CONTINUED STORY.

Get a man after talking truth to him a year, and you could hardly drive him away with a club. You can't do all this unless you catch and hold attention by making your ads. readable. Yours must be a continued story, and the man or woman who reads only an occasional chapter will be but feebly impressed.

#### NEWS IN ADS.

Now as to making ads. readable: Your store is a little world. It has little happenings that will afford a text, if not the material, for ads. The very origin of hundreds of articles in stock affords material for interesting little talks that can preface your business story. Opening talks that have a little relevancy to the subject in hand are always desirable. When any particular line of goods is to be advertised, look at them, feel them, smell or taste them if necessary, and see if some feature that would be interesting to the public does not present itself. You may have something to sell that you know is a bargain, or that should be particularly desirable. You know you bought close, you are sure the quality is unusual, the jobber may have advanced some argument or given information that induced you to buy. These things will interest the public. If you really feel that certain goods ought to sell, something makes you feel so; tell it. The chance remark of a traveling man or something that a customer says may give you arguments that will influence others. Don't be afraid to let people see the inside of your business. If you can't do this the business is wrong. There is no store in the country where this idea of making confidants of the people is so fully carried out as at Wanamaker's.

This little fragment of one of Wanamaker's ads. will illustrate just what is meant by "store news."

"He spends half of each year among the linen makers of Ireland, Germany and Scotland—this linen buyer of ours. That is why the special lots that would now and then get on the market are caught and turned towards Wanamaker's."

"For instance, a maker had a trifle less than a thousand dozen napkins, perfect in finish and weave. Wanted to sell, because he was about to change his lines. Cost nothing to find a buyer—ours was there. One quick loss settled it. The profit that should have been his is yours."

No store is so small or obscure but what the every day happenings of its buying and selling afford items of news that will be interesting to the people. When there is really something to be told, no one can utterly spoil it in the telling, but it is better, of course, that it be told well. Some haven't the knack



## Bear This in Mind!

That the coldest soda that was ever run out of a soda fountain in this town comes from our new Matthews apparatus just put in new this year. It's a beauty and the best one made by the leading soda fountain maker in America. We draw the soda from the north-west corner and we hand it to you right off the ice.

**TOOTH BRUSHES.** We have just put in a large stock and of best quality.

**SPONGES.** A really good sponge is a luxury, and we sell the best.

**HAND MIRRORS.** We have a lot of Hand Mirrors at 25 cents each.

**R. L. TEARDALE & CO.,**

No. 7. KNOXVILLE, TENN.

of putting their thoughts on paper. Some can't get far enough away from their business to look at it from the buyer's side; they know their business so well, are so familiar with all its details, that they can't think of what will interest outsiders. Such people ought to have their ads. written by some one outside the store. Not necessarily professional ad. writers, though if I were to press my



own views I might say something different, but some one who can write gracefully and who can tell entertainingly what you have to say. A reporter for your local paper might do, or in fact any one who is experienced in writing for the press. Tell your writer about what you want to say, show him the goods if necessary, and let him tell it in his own way. Remember always that if you deserve trade, there are reasons why you deserve it. These reasons attractively stated will bring you the trade you deserve.

### Criticism and Comment.

#### A CIRCULAR THAT MISSES THE POINT.

R. H. Venable, Louisville, Ky., sends a small circular and two ads. for criticism. The circular is attractively gotten up. Just about the right amount of ex-

## I Would be Ashamed

To say that I was the Cheapest Druggist in the City, because if I did, it would be either a prevarication or I would have to resort to methods of substitution that would be detrimental to my patrons who trust me with the compounding of their prescriptions.

CHEAP DRUGS are dear at any price. My long experience in the drug business has taught me to give my customers "What they ask for." Physicians' Prescriptions a specialty. Soliciting a share of your patronage, I am, yours,

**R. H. VENABLE,**  
Pharmacist.

pense has been put on it. The paper is good and the printing excellent. The matter on the circular is reproduced in miniature here. This little talk is pretty good, but it does not quite make its point. Mr. Venable wishes it understood no doubt that, quality considered, he sells as cheap as any one. We can infer this, but it is better not to leave too much to inference, and I believe that where cheap drugs are talked of, it would have been well to have added that drugs are only cheap when absolute purity goes with moderate cost and that that kind of cheapness would be found at his store.

ADS. THAT TELL TOO LITTLE IN A DULL WAY.

The two ads., which are probably used in conjunction on a counter wrapper, are fair only. They state that Venable's

Headache Specific is a certain and positive cure for headaches, neuralgia, etc., and that it is to be found at all drug stores. The only basis for criticism of any ad. is the question, "Will it sell goods?" If so, why? If not, why? An ad. is an advocate or salesman and it will probably have to make its plea in the presence of several other salesmen, for headache remedies are numerous. If there was no competition these ads. might do very well, for then a mere announcement of this kind would attract many customers. But there are plenty of competitors.

## TOOTH BRUSHES.

A very pretty girl was on one occasion about to be proposed to. The young man looked at her teeth as young men have a way of doing. There was no proposal. The young man was a fastidious fellow. Clean white teeth are particularly desirable for all classes and conditions of people. Better remember that! Also that we have one of the largest stocks of Tooth Brushes in Brockton, besides Tooth Powders by the oz., bottle, tube or box, at Frank O. Randall & Co.'s, druggists, Linden block.

They have their salesmen on hand in the shape of ads. It is safe to say that most of them tell their story in about the same fashion. They have certain cures for headache and they are sold by all druggists. Array these salesmen in a line, let them say their say, and the result would be drearily monotonous. No hearer would be convinced; no one would know any more than they did to start with. Let some bright salesman break forth in another key, let him tell his story in an unusual way, let him give a few reasons why his remedy is better, cheaper or safer than the others and he will have the attention at once. I should say that the ads. in question would not sell goods because they tell about as little as could be told, and this little is told just as every one else is telling it.

#### ONE THING TO REMEMBER.

One thing can always be remembered to advantage—the oft reiterated statement that an ad. is a salesman. Think what your salesman has to do, remember his surroundings, the clamor of competing salesmen, and see to it that his argument is stronger and manner more persuasive than those with whom he has to cope.

### SODA WATER ADVERTISING.

J. D. FOUNTAIN.

The two suggestions offered this week in the way of soda water advertisements ought to prove trade bringers, and they no doubt will, in most of the medium sized towns where the cost of using

newspapers is not so high as to make the use of liberal space beyond the means of the retail druggist.

The bear illustration is one which I know will take in most communities. It makes a cold chill run up and down one's back to look at the picture, and this sense of coolness is the most important idea to convey.

In one down-town drug store in New York City, I remember, the ceiling decorations showed icebergs and winter scenery around the frieze in low relief. It made one cool to go in there and look at so much ice, even if it was only plaster ice, or possibly *papier maché*. He had the right idea; he made money. The ice and the sense of coldness no doubt helped to make sufficient money to pay \$7,000 a year rent for a small store and still make money.

Beauty is a powerful magnet, and a beautiful face or handsome figure will always catch the eye. For that reason it is desirable to use pretty faces of women to attract men, and of babies to



## Soda Water Babies

Are always welcome at our soda counter. There were a lot of them in yesterday and they made the store lively. We sold yesterday 953 glasses of soda water, and it was an ordinary day, too.

**FIRE WORKS**—Just a few of the perfectly safe kind for children and at the right price.

**TOILET SOAPS**—A good big stock of the leading brands at reduced prices for one day.

Store open until 11 P. M. Saturday night, and say, don't forget to ring the bell if you want a prescription filled at midnight.

**J. I. SOLOMONS,**  
SAVANNAH, GA.

No. 8.

catch the eye of women. All women like to look at pictures of babies, and if well done they will always catch the eye of the women. Unfortunately, the advertising value of babies' pictures has been so thoroughly understood and so aggressively utilized that even the women are rather tired of seeing them. With pictures of women, also, there is always more scope; the pictures are capable of a more varied interpretation, and can thus be made more effective.



## NEWS OF THE FORTNIGHT.

### More Pure Food Prosecutions.

There seems to be no prospect of a lull in the fight begun by the Ohio Pure Food Commission against violators of the pure food laws of that State. The prosecution of several grocers for selling various adulterated articles of food is reported on this page. Paskola gets a further installment of free advertising in reports of suits for damages against the Food Commissioners.

### Jobbers Growing Less.

Bullock & Crenshaw of Philadelphia have announced their intention to withdraw from the wholesale drug trade. The number of jobbing druggists in Philadelphia is decreasing yearly (page 370).

### Soda Sales to Negroes.

The Supreme Court of Illinois has decided that it is perfectly legal for a druggist to refuse to sell soda water beverages to negroes at his own discretion. We review the case of Cecil against Green on page 370.

### State Association Meetings.

We report in this issue, on pages 371 and 372, the respective meetings of the Pennsylvania and the Missouri Pharmaceutical Associations. The attendance at the Missouri meeting was very limited, the recent disastrous wind storm in that State having seriously interfered with the business of many of the members. The annual meeting of the New York State Pharmaceutical Association, which is now in session at Buffalo, promises to be one of the most successful in its history.

### Experience Before Graduation.

The burning question as to whether the colleges of pharmacy shall or shall not demand experience qualifications from their matriculants has been revived by the action of the Missouri Pharmaceutical Association in adopting a resolution calling upon all institutions granting the Ph.G. degree to maintain the significance of the same by requiring from all applicants for graduation evidence of drug store experience (page 372). The Buffalo College of Pharmacy has taken a contrary course and the requirement of experience before graduation formerly in force has been done away with (page 374).

## The Ohio Food Commission.

CINCINNATI, June 17.—The only life that has been shown by the Dairy and Food Commission here for some time was manifested last week, when Deputy Commissioner Rentrop swore out several warrants before Squire Kushman for the arrest of grocers for selling various kinds of adulterations. Among those who are to be brought into court is B. H. Kroger, the well-known grocer, who openly called Commissioner Luebbing a blackmailer before the Legislative Investigating Committee a few weeks since. Mr. Kroger is the proprietor of the Great Western Tea Company of this city, and is very wealthy. He is charged with selling tea not up to the standard. Other grocers are arrested for selling adulterated spices, and one man must answer for dispensing a brand of catseup which is said to contain salicylic acid. All the defendants were released on bail bonds of \$100 each and they will be arraigned for trial before Squire Kushman in a short time.

### M'NEAL'S ANNUAL REPORT.

The annual report of Dr. McNeal, Dairy and Food Commissioner, for the past year was filed in the office of Governor Bushnell on the 6th inst. It shows that the cost of operating the department for the year ending March 15, 1896, was a little more than \$50,000, of which \$22,600 was appropriated by the Legislature, and of the rest \$11,000 was left over from last year and \$17,570 was the proceeds from fines, &c., collected during the year. The report embraces 576 pages. Among other things Dr. McNeal says:

Much work has been done and greater attention paid by dealers to the quality of goods sold by them than ever has been done before since my connection with the department. Immense quantities of bad goods have been shipped out of the State, and manufacturers from all parts of the country are anxious to ascertain the requirements of law before shipping goods into Ohio. In many cases manufacturers have informed us that they have found it necessary to put up one class of goods for Ohio and cheaper goods to be sent into the States where laws were not enforced. It is within the pale of fact to assert that more work has been done in the prevention of fraud in the sale of food and drug products, and in the preservation of the public health thereby, in the State of Ohio, during the past two years, than in all the other States in the Union combined. Seven hundred and six pure food cases were placed upon the docket of the department for the year. Sixty per cent. of the total number of food and drug samples analyzed were found to be not up to the standard.

Dr. McNeal declares that the use of coal tar products in food products is injurious to health. The effort made to enforce the pure food laws is referred to, and the commissioner insists on the

continuation of the policy which has been carried on for the past two years, declaring that it is the only way to protect the people from impurities. He also speaks depreciatingly of the efforts to have the laws changed. In speaking of proprietary medicines Dr. McNeal says:

The writer was once engaged in the manufacture of a proprietary article of this character which contained not less than four virulent poisons, and to-day the same article is upon the shelves of one-half the drug stores of the country.

## Food Commission Sued.

CINCINNATI, Ohio, June 18.—A telegram which appears in an afternoon paper to-day under a Columbus date line states that A. J. White, president of the Predigested Food Company of New York, will bring suit for \$200,000 damages against Dairy and Food Commissioner McNeal and others identified with the department in a few days. This statement was given to the public by Gen. Thomas E. Powell, chief counsel for the New York gentleman in the recent investigation before the Ohio Legislature. It was stated in this journal some time ago that such a suit might be brought, but now that General Powell has spoken all doubt seems to have vanished and the proceedings will be watched with intense interest.

The suit will be filed in Columbus, and as far as can be learned the following gentlemen will be called upon to enact the rôle of defendant: Dr. McNeal, Dr. Sterrit, Amos Dye, Gus Luebbing, Chas. T. P. Fennel and one or two others. At least there will be several defendants, but it is not positively known who will compose the *personnel* of the defense. It is believed here that they will be charged with conspiracy to drive Paskola, Mr. White's product, out of the market. The local *attachés* of the Food and Dairy Commission claim they do not fear any suits which Mr. White may bring, but it is an open secret that they do not care to have the doings of the department dragged into court any more. This is thought to be particularly the case with Judge Dye, who is the loudest in his boasts that he does not fear being brought into a court of justice. It is well known that Mr. White has plenty of money, and that he is a fighter has also been fully demonstrated. For this reason the promised legal tilt will be watched most closely.

## Naval Apothecaries to Be Warrant Officers.

Dr. George F. Payne of Atlanta, chairman of the A. P. A. Committee on the status of the military pharmacist, has received the following letter from Mr. Wilson of the House of Representatives:

Dear Sir: The sub-committee has inserted a clause in the *personnel* bill granting naval apothecaries the rank of warrant officers. The bill is through the sub-committee, but it is very doubtful whether we get it through the full committee this session.

The section in behalf of the pharmacists finally passed the sub-committee without objection. I think the provision a just one and have no doubt it will remain a part of the bill.

Cordially yours,

F. H. WILSON.

WASHINGTON, June 4, 1896.

### No Jobbing of Drugs.

BULLOCK & ORENSHAW ISSUE A CIRCULAR TO THE TRADE TO THIS EFFECT.

PHILADELPHIA, June 20.—Bullock & Orenshaw have given notice to the trade that after July 1 they will discontinue the jobbing drug department of their business, but the following departments will be continued as heretofore: Chemicals, Chemical and Pharmaceutical Apparatus and Utensils; the importation of Rare Alkaloids and Products; manufacture of Pharmaceutical Preparations, Sugar Coated Pills, and their own specialties; the Retail Drug and Prescription Department. This is another well-known house that have withdrawn their jobbing business, and now the wholesale drug houses in this city are very few.

### LITTLE PROFIT IN REBATE GOODS.

This house started in 1849, and are known throughout the country. A few years ago a circular somewhat similar to this was sent out, notifying the trade that they would discontinue the sale of patent medicines, and since that time these goods have not been handled. The business in the future is to consist principally of handling their own goods and such special lines as enumerated above. Mr. Bullock says that the firm are not going out of business, but are rather going back to where they first started. It is contended that there is very little profit in the handling of patent medicines and proprietary goods, and for this reason it has been decided to drop the sale of same.

### The Right to Refuse Sale to a Negro.

The decision of the Supreme Court of Illinois in the case of Abraham Cecil against Homer H. Green was filed May 12. Mr. Green keeps a drug store in Bloomington and runs a soda water fountain, and the plaintiff, a colored man, asked for a drink of cherry phosphate and tendered the price, but the druggist refused to serve him on account of his color. On this he brought suit. The lower courts sustained the demurrer of the defendant, Green, to the declaration, and the Supreme Court affirms the judgment, finding that the drug business does not come within the class of places known as places of accommodation or amusement, and that the right of the merchant to personal liberty in the transaction of his private business cannot be abridged. The decision of the court reads in part as follows:

Under the averments of this declaration the defendant is the proprietor of a drug store and keeps a soda fountain. Such places can be considered places of accommodation or amusement to no greater extent than a place where dry goods or clothing, boots and shoes, hats and caps or groceries are dispensed. Nothing in this provision requires a physician to attend a patient, the lawyer to accept a retainer, the merchant to sell his goods, a farmer to employ labor unless of his own volition, regardless of any reason, whether expressed or not.

While this decision might seem not to be in accordance with the spirit of the fourteenth amendment to the constitution of the United States, careful consideration would indicate that it interprets that amendment, as well as the various statutory enactments of the particular State in which it was rendered, in a manner which is at heart in accordance with the popular idea of justice.

The seller must perforce consider such matters from the standpoint of his own

interests, and since those interests would undoubtedly suffer from selling to negroes, he follows a natural law in refusing to do so; and, so long as this refusal does not prejudice the health or welfare of the would-be purchaser, the law will no doubt uphold him. Public carriers and hotel keepers are in an entirely different category, as refusal on their part to serve a person might result in prejudice to the health or welfare of the person refused.

While the existence of racial prejudice is to be regretted, it is still so strong in those parts of the United States where negroes are most plentiful that, regardless of the personal leanings of the seller he must pay regard to it or suffer severely for not doing so.

### Took \$13,000 from the Board of Pharmacy but Still Goes Free.

DES MOINES, Iowa, June 2.—Judge Holmes instructed the jury to return a verdict of not guilty in the case of the State vs. Suel Spaulding. W. A. Park, attorney for the State, went before the Grand Jury late in the afternoon and asked to have another indictment returned against Spaulding under the general statutes, so that it is possible he may yet be convicted. The general belief is, however, that the statutes are lame on the point in question and that Spaulding can never be convicted, although he admits a theft of \$13,000 from the State Board of Pharmacy. The court instructed the jury to return a verdict for the defendant on the ground that he was not a State officer, which was done at once.

"The defendant," Judge Holmes said, "was charged under section 5214 of the code with embezzlement as a public officer. This is a special different statute. I cannot find that there was such an office as secretary and treasurer of the pharmacy commission; and there was no act of the Legislature creating the office. In chapter 75, acts of the Eighteenth General Assembly, the Legislature authorized the appointment of three pharmacy commissioners, who should elect from their own number a president, vice-president, secretary and treasurer. They were given authority to form rules and regulations for their government and the manner of issuing pharmacy permits and licenses to itinerant medicine men. It was claimed by the State that this authority to make by-laws and rules gave them authority to create a public office. I think this ground is not well taken. The power given, in my opinion, was no reason for the creating of the office of treasurer. There was no money received, except the private money of the commissioners—accepted by them as their salary—and any such office was probably made to take care of their money and prevent any one commissioner receiving more than his share.

"Had the defendant been a member of the pharmacy commission, it would be a serious question whether or not he is not a State officer, for the commissioners are public officers. Their terms of office are fixed by statute. But the commissioners elected a secretary and treasurer outside their number and in doing so I think they took a step not contemplated by the Legislature. I have noticed that when a public office has been created by the Legislature it has been done by express declaration of statute. Therefore, as I must hold that the defendant is not a public officer, I will instruct the jury to return a verdict of not guilty under the indictment."

### New Fuller's Earth Plant.

A large establishment for the refining of fuller's earth is being put up at Hot Springs, S. D., by Eastern capitalists. The refining process is a secret and the entire plant will be inclosed with a high board fence and no visitors allowed. It is understood that it will increase its capacity, as an effort will be made to shut out all importations of fuller's

earth. There are inexhaustible deposits of the raw material in this vicinity.

### Northwestern University School of Pharmacy.

The commencement exercises of the Northwestern University took place at the Auditorium, Chicago, June 11, at 8 o'clock p.m. The oration was delivered by the Hon. D. H. Chamberlain, LL.D., of New York City.

The total attendance of students at the university during the year just closed exceeded 3,000. The School of Pharmacy was attended during the year by 882 students, of whom 146 graduated.

The graduating class of the School of Pharmacy, June 11, consisted of the following:

#### PHARMACEUTICAL CHEMIST.

Howard C. Lisle, Sherman R. Macy, C. Osseward, Alexander O. Rowe, Bower T. Whitehead, Ferdinand A. Wilde, Jr., Jesse F. Woolsey.

#### GRADUATE IN PHARMACY.

Andrew C. Albright, Edward T. Alford, Robert E. Allen, Charles Albert Anderson, Charles August Anderson, Claude E. Bamborough, Louis C. Bauman, Francis B. Beck, Arthur E. Beyer, Ernest Bishop, Oscar C. Brinkman, John A. Caryl, Horace W. Chittenden, Albert R. Collins, Frederick W. Copeland, Edgar C. Corgan, Louise M. Crothers, Ralph C. Cupler, Walter S. Davis, John P. Delaney, Charles H. Demaray, John C. Dennis, Timothy M. Donovan, John P. Dow, William F. Egler, George Freund, Eva K. Gatzman, Milton B. Glazebrook, Benjamin Gleason, Andrew E. Godfrey, Bruno H. Goll, Jr., William L. Grassly, Clarence A. Graves, Mary T. Green, William C. Gretter, Charles Grisdale, Franklin W. Halbkat, Oliver L. Halsell, Otto T. Hansen, Eugene W. Hanson, Clarence H. Henton, Carl Heper, Frank A. Hill, Agnes M. Howard, Newell T. Holbrook, Lyle Leroy L. Howe, Albert H. Johnson, Frank K. Jones, Robert D. Kilvary, K. Mary Kline, George D. Knapp, William L. Knuth, Robert August J. Koch, William Krizen, Cornelius A. Leenheer, Samuel R. Magee, Orlando S. Marsh, Cornelius L. McDermott, June McDermott, John S. McLean, Robert W. Meloan, Albert O. Meier, Otto F. Meyer, William C. Morris, J. Mulvey, John E. Murback, John F. Nelson, Frank Neufeld, Charles J. O'Keefe, Clare A. Ott, John W. Palmer, Loran C. Paxson, John W. Phalen, Henry W. Pond, William H. Rice, Edmund F. Rockwood, Abdeile Rummel, Charles A. Sayre, Charles D. Schreiber, Clayton J. Snyder, Theodore W. Stock, Lewis L. Stone, William H. Sweet, Oscar D. Thorelius, Leslie J. Trowbridge, Fayette B. Viall, William G. Walker, John Wenzel, Henry K. White, Mabelle B. Whitney, Franklin B. Wing, Thomas W. Wrixon, Jr.

The honor men of the graduating class were: Claude E. Bamborough, Francis B. Beck, Walter S. Davis, Franklin W. Halbkat and Cornelius L. McDermott.

The Gilpin, Langdon & Co. prize was awarded to Cornelius L. McDermott.

The work of next school year begins on September 1. Hereafter, junior students will be admitted to the School of Pharmacy of Northwestern University only during the first week of September. The admission of juniors at the beginning of February has been discontinued.

## Pennsylvania Pharmacists.

### ANNUAL MEETING OF THE STATE ASSOCIATION.

THE annual meeting of the Pennsylvania Pharmaceutical Association, which begun at Mount Holly Springs on June 16 and finished on June 19, was one of the most gratifying sessions that this association had ever had. The meeting began at 4 o'clock on June 16. This session was practically given up to the formality of receiving delegates and reports of some of the standing committees. In the afternoon Hugh Cox, the retiring president, made his address, which was followed by a reception, which consisted of speeches and musical selections by the orchestra. On Wednesday morning more reports from the standing committees were received, and as the report of the metric system was made a special order of business, this was given precedence over all, and after quite a discussion this system was recommended. Besides the standing reports, the secretary and treasurer also made a statement of the business, which was followed by the reading of papers and queries, which occupied the rest of the morning session. The afternoon session was postponed until 5 o'clock to give way to some of the social features. There was a game of baseball between the drummers and the druggists, in which the latter proved their supremacy and superior skill. A potato race by the ladies was a very funny incident. At 5 o'clock the meeting reconvened and the time was devoted to the receiving of reports of delegates who were appointed at the meeting last year to attend the meetings of the adjoining State associations, the N. W. D. A. and A. Ph. A. The report of the committee which attended the State Medical Association was the most important, as they brought from that body an invitation to this association to exhibit preparations made according to the National Formulary. This exhibit is to be made at the next meeting of the State Medical Association, which is to be held in Pittsburgh in 1897. The invitation was accepted.

#### Members Have a Jolly Time.

On Wednesday afternoon the meeting was a jollification one. It was devoted to a burlesque on the examination of a class in the college of pharmacy. This college was especially chartered for the occasion and consisted of M. N. Kline, president; Joseph P. Remington, professor-in-chief, and J. H. Redsecker, general manager. Prior to calling the class to order they exhibited their charter and then the examination began. The students were composed of members of the association, among whom were three ladies. There were a number of theses, but owing to the late hour no diplomas were awarded until the following afternoon.

#### Discussion on Counter Prescribing.

Thursday morning was principally devoted to the reading of the papers and queries, of which there were quite a large number on a variety of subjects, five being on "To What Extent is a Pharmacist Justified in Prescribing?" The complete list of papers was as follows:

"Eminence in Pharmacy." Wm. D. Thompson, Philadelphia. "Answers to a Number of Queries." S. N. Hill, Corry, Pa. "Is it Desirable or Practicable to Interchange Certificates Between Pharmacy Boards of the Different States?" F. W. E. Stedem. "To What Extent is a Pharmacist Justified in Prescribing?" F. W. E. Stedem, William B. Thompson, D. J. Thomas of Scranton, S. H. Hill and John F. Patton of Philadelphia. "Answers to Eight Queries." Emil Ott. "What Preliminary Education Should Our Apprentices Have and at What Time Should Their College Education Begin?" F. W. E. Stedem. Answer to the Query: "It is Asserted that Many of the So-Called Malt Extracts are nothing more than a Strong Beer. To what extent is this true?" Louis Emanuel, Pittsburgh. "Does High License Law Prevent Sale of all Liquors Except upon Physician's Prescription? Is the Law a Wise one and is it Generally Lived up to?" J. A. Miller, Harrisburg. "Synthetic Oils." Notes on Assay of Gum Opium. Lyman B. Kebler. "Solid Extracts." Chas. H. La Wall. "Short Hours for Druggists." W. H. McGarrath. "The Detection of Acetanilid in some Closely Related Synthetical Remedies." Frank H. Moerk, Philadelphia. "Color Tests Observed in some Synthetical Remedies." Frank H. Moerk. "Sumbul." John H. Hahn.

At this same session the association again put itself on record in favor of free alcohol. On Thursday morning the delegation visited the Indian School in Carlisle and also Dickinson College, after which the convention convened and was devoted to the consideration of a number of amendments to the pharmaceutical law, among which was one on the subject of whether registration should be required. This created considerable discussion and many took part in the controversy. Many of those present wanted to follow the custom of the medical profession and not have registration; on the other hand, it was contended by members of the pharmaceutical board and members of the association that re-registration is important, not only to enable the members of the board to keep track of those who have not registered, but to enable them to better control those who are trying to conduct business with registration. In the afternoon further consideration of this matter was taken up and it was eventually referred to the Legislative Committee. The installation of officers also took place, accompanied by speeches by those who were newly elected.

#### Officers Elected.

The new officers are as follows: President, Joseph P. Remington; vice-presidents, A. R. Dunham, Reading, and D. Keefer, Chambersburg; secretary, J. A. Miller, Harrisburg; treasurer, J. V. Lemberger, Lebanon; local secretary, D. J. Thomas, Scranton. Mr. Thomas, as well as the Executive Committee, were instructed to make arrangements for the next session of the association, which is to be held in June, 1897. Place selected is the Delaware Water Gap.

On Thursday evening the diplomas were conferred on the candidates who successfully passed the mock examination. On Friday the association proceeded in a body to Gettysburg, where they were shown over the historic battle ground by Captain Long, after which the 1896 meeting was over. Among others present were Thomas F. Main, New York; George J. Seabury, New York, and Mr. Aughinbaugh, Hagerstown, Md.

### Brooklyn Pharmacists.

The usual monthly meeting of the Kings County Pharmaceutical Society was held Tuesday, June 9, at the Brooklyn College of Pharmacy, 329 Franklin avenue, President William Muir in the chair.

#### REPORT ON TELEPHONE FIGHT.

After minor business had been transacted, the society listened to a report of the Committee on Legislation, submitted by Mr. France, in which answer was made to criticisms of the society by the manager of the New York & New Jersey Telephone Company, in reference to its demands for cheaper telephone service. The report recounted at length the difficulties encountered by the committee in its efforts to secure needed reforms from "a corrupt Legislature."

#### DRUGGISTS' LIQUOR LICENSES.

In relation to the matter of securing excise licenses under the Raines act, the association was informed that as yet no druggist in New York City had paid the fee, and that only four in this city had so far reported doing so. The secretary was instructed to draft a letter to Commissioner Lyman asking him to obtain an opinion from the Attorney-General on the question. It was voted that the Kings County Pharmaceutical Society defend the first case of an arrest of a druggist in the society for selling alcohol without a license. Attention was called to the fact that alcohol was sold by dealers in painters' supplies without license, and that this is true also of dealers in varnishes and shellacs.

The radical action of the society, President Muir said, is due to the fact that it has been impossible to get any information from the District Attorney or from the Attorney-General regarding the requirements of the new law as it affects the druggists.

He wished it to be well understood that there was no intention of evading the law. The situation was simply that in Brooklyn the trade had never been liquor dealers, but simply dispensed it as they do other drugs and with an ordinary drug label; now liquors will not be handled at all. Regarding alcohol, the desire is to find out exactly where we are at with regard to its sale without license.

A letter from the Pabst Brewing Company gave assurance that as malt extracts are held as medicines by the internal revenue laws there was little reason to suppose that they would be classified otherwise under the Raines law.

#### MOTION TO REINSTATE DR. ECCLES DEFEATED.

Considerable discussion arose over a resolution introduced by R. C. Werner seeking to restore to membership in the society Dr. Eccles, who was formerly Dean of the College of Pharmacy, and at one time president of the society. The motion was finally laid on the table. Dr. Eccles resigned four years ago.

#### COMMITTEES FOR 1896-97.

The standing committees for the year were announced as follows:

*Legislative:* Albert H. Brundage, Thomas I. France, R. C. Werner, Adrian Paradis and W. B. Averre.

*Committee on Affairs Pertaining to Pharmacy:* W. C. Anderson, A. P. Lohness, and C. O. Douden.

**Committee on Library:** H. W. Schimp, Oscar Kline, W. A. McIntyre, J. H. Droge and George Zellhoefer.

**Committee on Trade Matters:** D. L. Cameron, Charles Dennis and Robert H. Lahey.

**Committee on Revision of Pharma-**

**copoeia:** L. H. Pamphilon, W. P. DeForest, C. Y. Schlesner, L. F. Stevens and P. W. Ray.

C. O. Dowden, D. L. Cameron and William Muir were appointed delegates to the meeting of the State Association in Buffalo on June 28.

## Missouri Pharmaceutical Association.

### MEETS IN ANNUAL SESSION.

#### Attendance Not Up to Previous Meetings.

ST. LOUIS, June 18.—The Missouri Pharmaceutical Association has recorded one more annual meeting. They cannot boast that the seventeenth was the largest one in their history. The scientific sessions and business meetings did not exceed in value those of the past. But when the adverse circumstances under which the meeting was held are taken into consideration, the members are to be congratulated on so successful a meeting. Many St. Louis members had made all arrangements to attend the meeting, but the cyclone upset all their plans, so that the delegation from this point was not over one-third what it would otherwise have been.

The first session was duly opened at 2 p.m. Tuesday, June 9, by President J. M. Love of Kansas City. Prayer was offered by Rev. Barbee of Kansas City, and an address of welcome in behalf of the Elms and Excelsior Springs by Colonel Morse. Response in behalf of the association was made by Professor Francis Hemm of St. Louis, and on the part of the Travelers' Association by F. R. Sharlach of Moberly.

The Committee on Membership reported 20 new applications, which, after being passed upon by the council, were duly elected to membership.

#### RECOMMENDATIONS BY THE PRESIDENT.

President Love read his address, which was referred to a committee consisting of Wm. Mittelbach, J. H. Ewing and C. E. Corcoran. Subsequently the committee reported, indorsing most of the recommendations offered by the president, and this report was accepted by the association. The following are among the important recommendations made by the president: To district the State and appoint a member living in each district as collector of dues to assist the treasurer. The incoming council was instructed to appoint a collector for each Congressional district in the State. Another recommendation was that the manufacturers of infant foods, proprietary remedies, etc., be compelled by law to place on their inside label and outside wrapper a sworn statement as to when the preparation was made and how long it would keep in good condition. This was indorsed by the association and referred to the Committee on Legislation. Secretary Whelpley read his report, showing 675 members on the roll. The treasurer's report was read, showing a balance of \$184.25 on hand, which is an improvement over the financial standing of last year. The treasurer's books were subsequently audited by the council and reported in good condition.

#### PAPERS ON PHARMACY.

C. E. Corcoran, chairman of the Committee on Papers and Queries, reported the following contributions on hand:

1. Process for spirits of nitrous ether, with practical demonstrations, by Prof. David Walker of Kansas City.
2. What shall we do to induce the druggists to become members of and attend the meetings of the A. Ph. A. and M. Ph. A., by A. N. Doerschuk of Kansas City.
3. How to prevent the cutting of prices on patent and proprietary medicines, by T. A. Moseley of Harrisonville.
4. Semi-proprietary or so called elegant preparations, by C. E. Corcoran of Kansas City.
5. The professional and business aspects of pharmacy, by T. A. Moseley.
6. The future of pharmacy in the United States, by A. N. Doerschuk.
7. Semi-proprietary or so-called elegant preparations, by R. S. Brown of Leavenworth, Kan.
8. Semi-proprietary or so-called elegant preparations, by J. M. Love, of Kansas City.
9. Hints for the benefit of M. Ph. A. members, by Ambrose Mueller, St. Louis.
10. Some speculations in organic chemistry, by Prof. J. M. Good of St. Louis.
11. Eighteen years of pharmaceutical reminiscences in Missouri, by F. R. Dimmitt, of Rockport.
12. Methods of detecting drug adulterations, with illustrations, by Prof. Francis Hemm of St. Louis.
13. A new method of preserving plants and flowers, by J. S. Write of Indianapolis, Ind.

Prof. Francis Hemm, chairman of the Committee on Drug Adulteration, read the report of the committee and presented the greetings and regrets of F. W. Sennwald, secretary of the State Board of Pharmacy, who was prevented from attending the meeting on account of the cyclone.

The second session was called to order at 9.30 a.m. Wednesday, June 10. After routine business the president appointed A. H. Caffé of Carthage, C. E. Corcoran of Kansas City and Prof. Hemm of St. Louis as a committee on time and place of holding the next meeting.

#### TO CUT DOWN THE PHARMACOPEIA.

Wm. Mittelbach, chairman of the committee on U. S. Pharmacopoeia, read the report of this committee. The report contained some very radical recommendations. They recommended omitting a large number of the preparations, tests, etc., and cutting down the size of the next Pharmacopoeia. These recommendations were made to bring the members out on the subject, and it certainly did. Prof. J. M. Good carefully reviewed all the recommendations and seemed to express the views of nearly every other member when he objected to omitting any which they had suggested.

At the fourth session, Thursday, June 11, 9.30 a.m., the Committee on Exhibits reported that the following firms had exhibits at the meeting:

Campbell Paint & Glass Company, Kansas City.  
Carter White Lead Company, Omaha, Neb.  
Johnson & Johnson, New York City.  
Eli Lilly & Co., Indianapolis, Ind.

#### EXPERIENCE BEFORE GRADUATION.

The association passed the following resolution, and the secretary was in-

structed to send a copy of the same to every college of pharmacy or institution having a course in pharmacy in the country.

**Resolved,** That all institutions granting the degree of Ph.G. be earnestly requested by the Missouri Pharmaceutical Association to maintain the established significance of this degree by requiring from all applicants for graduation satisfactory evidence of having served at least four years' apprenticeship in a drug store conducted by a competent pharmacist.

The Committee on Time and Place of Meeting reported at the fifth session—Meramec Highlands as the place and June 23, 1897, as the time for holding the next annual meeting. The report was unanimously adopted by the association.

#### OFFICERS FOR 1896-97.

The election of officers was next taken up and resulted as follows:

President, E. Soper, St. Joseph; vice-presidents, F. W. Sennwald, St. Louis; Dr. D. K. Morton, Missouri City; W. D. Sheldrup, Pierce City; treasurer, W. Mittelbach, Booneville; permanent secretary, Dr. H. M. Whelpley, St. Louis; assistant secretary, Ambrose Mueller, St. Louis; local secretary, Thos. Layton of St. Louis. Council.—J. M. Good, St. Louis; J. M. Love, Kansas City; C. E. Corcoran, Kansas City; R. E. Maupin, Pattonsberg; Miss R. DeWyle, Jefferson City.

The sixth session was held Friday forenoon, June 12, and was devoted to the installation of the newly elected officers.

President Soper announced the following chairmen for the different committees:

#### CHAIRMEN OF COMMITTEES FOR 1897.

Papers and Queries, Prof. Francis Hemm; Drug Adulteration, Wm. K. Ihardt; Transportation, Geo. E. Hopkins; Exhibits, H. F. Hasselbrock; Entertainment, J. W. Hannauer; Trade Interest, F. A. Faxon; National Formulary, Paul Hess; Membership, F. R. Sharlach; Legislation, T. A. Moseley; Microscopy, R. E. Maupin; Pharmacopoeia, J. E. Ewing; Deceased Members, O. N. Smith.

The association adjourned *sine die*.

### The College of Pharmacy of the University of Minnesota.

The graduating exercises of this college occurred at Exposition Hall, Minneapolis, June 4, 1896, and the following graduated: Arbes, Joseph Martin, Le Sueur; Cady, Frank E., Flandreau, S. D.; Cahil, James Lawrence, Eagle Center, Ia.; Haney, William Carlton, Henderson; Farmer, Dan E., Spring Valley; Haugen, John Edward, Kasson; Hosecheid, William, St. James; Hurd, Aunah, Minneapolis; Johnson, Flavius I., Bathgate, N. D.; Larson, Theodore Lewis, Kasson; McCulloch, Earl, Chatfield; Meisen, John Anton, St. Paul; Moen, Mathias, Starbuck; Nichols, Benjamin Heber, Northfield; Williams, Fred Horace, St. Louis Park.

Miss Hurd graduated at the head of the class, with a total average of 94 and an average in pharmacological studies of 97.

The roll of honor includes Miss A. Hurd, Mathias Moen, Theodore Larson.

The alumni banquet occurred in the evening at the West Hotel and was attended by 28 graduates. Many toasts were responded to, and a delightful evening closed with an address by Dean Wulling, who chose for a subject the motto of the alumni: "*Sui non proficit, de-ficit.*"



## IN GREATER NEW YORK

New York, Brooklyn, Jersey City and Vicinity.

Professor Diekman and Mrs. Diekman are spending the summer with relatives at Greenport, L. I., which is the former home of his wife.

Henry B. Platt and family will spend the summer in Switzerland, sailing from New York on June 80, by the North-German Lloyd Line.

Max Krueger, N. Y. C. P., '91, has resigned his place at Scherff's pharmacy, Bloomfield, N. J., and sailed for Europe, where he proposes to spend a few months' vacation.

Chas. Weiss of McKesson & Robbins and C. G. Euler of Dodge & Olcott recently took their third degree in masonry in a lodge in this city, which at the present rate of increase promises soon to become a drug trade lodge.

Henry W. Williams of the Mattson Rubber Company, and formerly head of the jobbing drug firm of Henry W. Williams & Co. of this city, has just been elected a junior lieutenant in Troop A, the fashionable cavalry troop of New York City.

Henry Sasse, N. Y. C. P., '98, formerly with C. S. Erb, and latterly with Herman Hobein, 387 East Houston street, this city, has given up his position with Mr. Erb to accompany his mother, who has recently arrived from Germany, on a tour through the United States.

Frank Boyd of the class of '88, N. Y. C. P., for the past five years with H. A. Cassebeer, at Seventy-second street and Columbus avenue, has made a change to James A. Hetherington, who has recently opened a handsome pharmacy at Forty-second street and Vanderbilt avenue.

Justice Clement of the Supreme Court in Brooklyn has directed the State Board of Pharmacy to give Mrs. Anna B. Hummel of Long Island City a license to practice pharmacy. Mrs. Hummel is the widow of a druggist who carried on business in Long Island City for several years.

August W. Brater, N. Y. C. P., '94, formerly with James H. Jones, Fordham, N. Y., has been appointed apothecary to the Manhattan State Hospital, on Ward's Island. The institution only received the name it now bears a few months ago, and is better known as the New York City Asylum for the Insane.

The New York and Brooklyn delegates to the annual meeting of the New York State Pharmaceutical Association left for Buffalo, by way of the Delaware, Lackawanna & Western Railroad, on Monday last, at 10.30 a. m. The delegation included Geo. J. Seabury, president; D. L. Cameron, vice-president, and Dr. Ray.

The adjourned hearing on the injunction granted some weeks ago in the case of the John D. Park & Sons Company vs. the members of the National Wholesale Druggists' Association and others, which was to have taken place before Judge Beach in Part I of the Supreme Court, in New York, on June 19, has been again postponed by consent, and is now set for the 26th inst.

Alcohol is not the only thing used in the manufacture of pianofortes, but that it figures to a considerable extent is shown in the claim for \$1,488 filed in the Court of Claims, in Washington, by Chickering & Sons, New York, which reads, in part, according to the *Oil, Paint and Drug Reporter*, "for alcohol used in the manufacture of pianofortes." Manufacturers of varnishes are yet to be heard from.

A cablegram just received from Budapest, Hungary, brings information that Andor Saxlehner of the firm of Andreas Saxlehner of that city, proprietor and exporter of the celebrated Hunyadi János natural aperient water, has been decorated by Francis Joseph I., Emperor of Austria and King of Hungary, with the Cross of the Iron Crown, Order III., on the occasion of the Hungarian Millennium celebration now being held in Budapest.

The war in Cuba has forced a number of native Cuban professional men to seek congenial occupations in the United States. M. A. Majarrieta, who recently purchased the pharmacy of E. Y. Shearer, at Lexington avenue and Seventy-first street, is an example. He was the proprietor of a pharmacy in Cuba until stress of the war destroyed his business and made life in the ill fated island unbearable.

J. C. Field, who purchased the G. S. Cook pharmacy, at Somerville, N. J., several years ago, has sold out to Herbert Griffin, formerly of Peekskill. There will be a company incorporated under the laws of New Jersey. It will be known as the Griffin Paint & Drug Company, the name of the company in Peekskill of which Mr. Griffin has been sole head for some time. Joseph H. Griffin of New York City will conduct the Somerville store and Herbert Griffin will establish a Peekskill branch.

The opening of a retail department by Merck & Co., the widely known manufacturers and wholesale dealers in drugs and chemicals of this city, has stirred a ripple of interest among the dispensing pharmacists of New York, who fear an active competitor for the prescription business of city physicians. The pharmacy, which is a well appointed one, is to be placed under the management of W. C. Alpers, the secretary of the New Jersey Pharmaceutical Association, of Bayonne, N. J.

Joseph A. Hayes, some time chemist to the Charles Roome Parmele Company, and well known throughout the country as a member of various pharmaceutical associations and other scientific societies, has been sent to Elmira Reformatory for the theft of gold bars to the value of \$8,000 from his former employers. He pleaded guilty to the technical charge of grand larceny and received the light sentence of a term in Elmira Reformatory on account of his youth. Hayes was notorious as a "jiner," and there is scarcely a State board of pharmacy in the country before which he has not appeared and secured registration as a licensed pharmacist. His membership in the New York College of Pharmacy terminated this month by his expulsion.

## Drug Trade Club.

At a meeting of the Board of Governors of the Drug Trade Club of New York, held Wednesday, June 10, new members were elected as follows:

Alfred Hy. Mason, Seabury & Johnson.  
John H. Lynch, Dillon & Co.  
C. A. Miller.  
Felix A. Bazin, David S. Brown & Co.  
William M. Walters.  
Herbert Turrel, Parke, Davis & Co.  
A. Schuyler, Jr., Johnson & Johnson.  
A. A. Stillwell.  
G. F. Henry, Marx & Rawolle.  
Spencer Miller.  
P. S. Tilden, F. H. Kalbfleisch Company.  
Fr. Schroeder.  
A. S. Brunier, Kalle & Co.

## VISITORS TO THE DRUG TRADE CLUB.

The following is a list of recent visitors to the Drug Trade Club:

E. E. Wood, New York.  
R. H. Peters, New York.  
E. H. M. Lively, Baltimore.  
Herman Conrad, New York.  
J. L. Dodge, Groton, Conn.  
A. Killgore, Flemington, N. J.  
J. St. George Dillon, Dillon & Co., New York.  
E. M. Hendrickson, Brooklyn.  
R. W. Pope, New York.  
Thomas G. Phinney, New Brunswick, N. J.  
P. H. Fairchild, New York.  
Dr. A. Dohme, Baltimore.  
R. W. Moore.  
Theo. K. Oldham.  
J. A. Culverwell, Montreal.

## British Seizure of an American Drugman's Yacht.

Advices from Baltimore Saturday state that the steam yacht "Nydia," which is owned by Commander I. E. Emerson of the Maryland Naval Reserve, and president of the Emerson Drug Company, was seized some time during the previous night by a party of British landmen, and when last seen was making for the open sea. Commander Emerson was reported to have been aboard at the time, and it is presumed that he was confined near the ice box by the piratical crew. The names of the parties who participated in the seizure, so far as could be learned, were James Hartford of Schoellkopf, Hartford & MacLagan, Henry T. Jarrett of the Mallinckrodt Chemical Works, William Townley Case of Boehringer & Son and W. W. White of Roessler & Hasslacher. As will be seen, they are all respectably connected, and their overt act is one of such unblushing piracy as to cast a gloom over the entire community that is left behind. Eminent authorities on international law unhesitatingly state that the act is in contravention of the treaty of 1813, and is also in defiance of the Monroe doctrine, besides conflicting with several of Hoyle's rules. It can only find possible justification in the theory that some of the party had previously been the guests of Commander Emerson, and were familiar with the hospitable resources of his beautiful craft. In that case no court in the land would convict any man for going aboard again by any method that was open to him. The *Oil, Paint and Drug Reporter*, from which we take the above, promises further particulars when the yacht is recaptured.

## NEW YORK STATE.

BUFFALO, N. Y., June 15.—W. S. O'Brian has opened his new pharmacy in the Ellicott Square Building. While the store is open for the transaction of business, the formal opening is necessarily deferred until the fixtures for the electric lighting are all placed, which will be in a few days. Without a doubt this is one of the handsomest drug stores to be found. The mosaic floor and the beautiful ceiling in plaster relief are in exquisite harmony with the fixtures of hand carved Cuban mahogany. The onyx fountain, with 24 syringes, has a mahogany top and Sienna marble base, and counter tops of Sienna marble. It is indeed a "thing of beauty" and, with Burroughs' ice cream cabinet, will prove a "joy forever"—or during the heated term at least. The showcases are Pollard's "400" of the finest French plate, and the perfume case has plate glass mirrored back, with plate shelves. Full length plate glass mirrors set in the framework of Cuban mahogany adorn the walls and are crowned with magnificent bulb lights set with iridescent shells. One of these lights graces the leaded colored glass partition between the store proper and the prescription department. The fixtures were furnished by C. H. Bangs of Boston, and the fountain is from Lippincott's. Mr. O'Brian's success in the past augurs well for the future of his new venture. An important factor in the success of this new store is the presence, as general manager, of Frank Goler, formerly connected with the late firm of Curran & Goler of Rochester.

## FOUR YEARS' EXPERIENCE REQUIREMENT ABOLISHED BY THE BUFFALO COLLEGE OF PHARMACY.

The faculty recently addressed a letter to each of the Board of Curators and to the Alumni Association, asking an expression from each as to the advisability of continuing in force the requirement for graduation of "four years' experience where physicians' prescriptions are dispensed."

The Alumni Association, at their annual meeting, unanimously voted in favor of a request that it be done away with. The Board of Curators also requested it, and fortified with these the matter was presented to the Council of the University of Buffalo, on May 25, and the change was authorized by them at that meeting.

## News Items.

W. R. Coon of Olean has purchased the F. W. King store at Angelica, and is refitting and remodeling it, much to its improvement.

Cole & Merriam, the well-known druggists at Suspension Bridge, have made a new departure by opening another store at the bridge.

E. E. Philpott of Niagara Falls, formerly doing business at Suspension Bridge, is now doing a fine drug business in the International Hotel block. He has a magnificent store.

The soda fountain at the pharmacy of E. J. Liebertrub, on Genesee street, is receiving a liberal patronage this season. Mr. Liebertrub, who is treasurer of the Erie County Pharmaceutical Association, is one who will always attract trade, and there is never any appearance of dullness in his store.

We clip the following from a late issue of the Buffalo Daily News: "Middle-

town, N. Y., May 25.—William H. Perlee, a well known druggist of this city, who was also an Ontario & Western engineer, attempted to jump on a swiftly moving engine to ride to the depot. He missed his hold and was ground to death under the wheels."

The Campbell Cutlery Company, Syracuse, have finally received their long expected medal and diploma awarded them by the World's Columbian Commission, for the specific merit of Campbell's sliding display trays for showcases; authorized by the United States of America by act of Congress. The medal is 3 inches in diameter. The obverse is the work of Augustus Saint Gaudens. The reverse is by C. E. Barber. It is inclosed in a fine aluminum case, velvet lined. The diploma is 25½ x 86½ inches. It is engraved and printed by the Bureau of Engraving and Printing, United States Treasury Department. They are said to be far superior to any ever before issued by any government.

## CONNECTICUT.

## G. E. LAMPING RESIGNS.

NEW HAVEN, June 18.—After being a member of the Board of Assessors for years, Druggist George E. Lamping of Meriden has resigned from that body. He was re-elected last October and his new term would have begun June 1. The reasons for his resignation are poor health and the business change that he will make next fall. At this time he will remove from his present temporary quarters in Morse's Block to his new store in the Cahill Block.

The other selectmen regret Mr. Lamping's action, as he is held in high esteem by his fellow members and they speak highly of his past services.

## RETAILERS ORGANIZING.

The New Haven retail merchants have formed an organization for self protection, and next fall they will submit to the assembly at Hartford several measures which have merit, and they expect favorable legislative action on them. The New Haven merchants have taken the initiative in this matter and have sent invitations to business men in neighboring cities to organize similar associations, and by next September they hope to form a permanent State organization.

## DRUGGISTS INTERESTED.

Druggists are more or less interested in the scheme. For years several measures have been agitated and suggested to be brought before the Legislature, but on account of no organization existing the step was not taken. These measures are for self protection, and the new conditions in business circles make it imperative that they should become laws.

Nothing much will be done during the summer months, but just as soon as fall opens work will begin by the retailers of all lines in about all the towns and cities of the State, and they will follow out the lines on which the New Haven organization was formed.

It is probable the druggists will be well represented in this new movement.

## SERVED FREE SODA.

Last Decoration Day the Bristol Drug Company of Ansonia served all members of the G. A. R. and the Sons of Veterans who called with free soda. Nearly all the paraders availed themselves of the enterprising drug company's

generous offer. Some members of the Woman's Relief Corps heard of the free distribution and they called at the store and asked if they were to be discriminated against. They were assured that this was not the case, and their orders were filled with celerity.

## General News.

Twenty-nine druggists in Bridgeport took out drug licenses during May. Most of these were very prompt with their license money, and the daily papers spoke of their good business methods.

George W. Curtiss and J. W. Skelly of Bristol will soon open a drug store in New Haven. They have been doing business in Bristol for some time under the firm name of Curtiss Pill Company.

John Lowe, ex-alderman of New Haven, has opened the Woodmont drug store, at Woodmont. This place was formerly conducted by Mr. Norcross of Wallingford.

Very shortly two Hebrews will open a drug store on Oak street, New Haven. It is believed that this will be the first pharmacy in New Haven ever conducted exclusively by Hebrews. The section in which they expect to locate is thickly settled by people of their kin.

George Malone's drug store, at the corner of Harrol avenue and Pequonock street, Bridgeport, was broken open by thieves recently. Some postage stamps and small change constituted their booty. This makes the third time Mr. Malone's store has been entered by burglars. Mr. Malone thinks some one has a false key.

The Barnes Drug Company opened their new store on Church street, New Haven, about two weeks ago. It is called the City Hall Pharmacy. The store is very tastily furnished and the entire front and side seem to be wholly protected by glass instead of the conventional brick wall.

The spotter who obtained some of the evidence against Druggist Brill of New Haven tried to induce Attorney Goodhart to bribe him. He called on the attorney and stated that in consideration of a certain sum he would leave town and not appear against Mr. Brill. The lawyer fired Hathaway out of the office.

## MASSACHUSETTS.

## CLERGYMAN ATTACKS BAY STATE DRUGGISTS.

BOSTON, June 19.—Rev. W. A. Thurston, pastor of the First Methodist Church, Beverly, in a recent Sunday evening sermon scored the Board of Aldermen of that city for granting licenses to druggists after the city had voted strongly in favor of no license. Among other things the clergyman said: "Forty-nine thousand registered sales of liquor were made in Beverly in 1895. That averages at least six sales to every grown person in Beverly in the year. What a lot of sick people there must have been in the city during those 12 months! Do you suppose that those 49,000 registered sales were all that were made? The sales, it is safe to say, cost the buyers \$22,000. The druggists may be good men, they may be honorable men, but they are in an infamous business when they sell liquor as druggists. Rum put over a counter by a Ph.G. is as bad in its effect as liquor sold by an ignorant barkeeper."

"One Beverly druggist said he had

practiced 27 years in Beverly, and had never put up a prescription for liquor. Not more than 100 prescriptions in all were given by the physicians last year, and they are all on record. The doctors do not think it necessary to license druggists. In going around among them last week I did not find one who thought it at all necessary that the druggists should have licenses.

"A certain druggist told me, within 24 hours, that he refused on an average 100 persons a week. That was before he had a license granted him. In all probability the '100 a week' will now be accommodated."

#### Meeting of the State Association.

BOSTON, June 19.—After an interesting and effective session, lasting three days, last week, the annual convention of the Massachusetts Pharmaceutical Association, which was held in Pittsfield, closed on Thursday with appropriate exercises. The following are the officers for the ensuing year:

President, W. F. Sawyer of Boston; vice-presidents: James J. Curran, Holyoke; J. J. Murphy, Pittsfield; C. P. Flynn, Boston; Treasurer, Thomas B. Nichols, Salem; secretary, James E. Guerin, Worcester. The trustees of the permanent fund are: F. E. Mole of Adams and J. Fred. Whiting of Great Barrington.

At the evening session of the second day a dinner was served at the Maplewood. One hundred druggists, with their wives and invited guests, were present. Retiring President Durkee presided and introduced the speakers. Mayor Hawkins spoke on "Good Citizenship," and was followed by President-elect Sawyer, J. H. Manning, M. F. Lee and others.

A drive to Lenox was one of the features of the third day's session.

#### SEVEN OUT OF FORTY.

Forty applicants for certificates were examined by the Board of Registration in Pharmacy at meetings held on June 9 to 11, and licenses were issued to the following list of applicants: Henry J. Pushard of Boston, Garry W. Russell of Somerville, Charles A. Bascom of Lowell, James H. Blake of New Bedford, David H. Campbell of Boston, Ernest Dalton of Chicopee and William H. Hale of Boston.

#### DIED IN THE WEST.

BOSTON, June 19.—J. F. Hinds, for the last 15 years in the employ of J. W. Tufts, Boston, died in Cincinnati on Wednesday, June 10, aged 85 years. He was a native of Charlestown, and lived there until a few years before removing to Boston. He filled the important position of assistant superintendent for a number of years, and although he had been in failing health for some time kept about his duties with characteristic pluck until forced to give up. He went to his father's home in Cincinnati in April.

#### DRUGGIST WOODBURY LOSES A LEG.

BOSTON, June 19.—On Wednesday, June 10, John A. Woodbury, one of the most prominent druggists in Eastern Massachusetts, was badly injured in South Framingham by being run over by a train of cars on the Boston & Albany road. He went to Framingham from Hopkinton in an electric car, which was late in arriving at the station, and he ran to catch the moving train, which

had started. He caught hold of the front platform rail of the last car, but the step being slippery on account of the rain he lost his hold and fell beneath the wheels. One leg was crushed between the knee and ankle, and amputation was rendered necessary. The operation was successfully performed at the South Framingham hospital, and there is a possibility of saving his life. Mr. Woodbury was born in Southboro, April 22, 1836. He is a druggist, and has been postmaster of Hopkinton for six years. This is his first year in the Massachusetts Legislature.

#### CURED THE WRONG MAN.

A few days ago a suit was entered in the municipal court of Boston by a man named James F. Smith against three doctors for an alleged libel. He claims \$3,000 damages. The defendants conduct a medical institute, and it is charged that recently they caused to be published in the newspapers a picture of the plaintiff, followed by a notice of a cure. It was headed, "Agent Smith's Cure." An interview was also published in which it was set forth that Smith had been a lifelong victim of catarrh, but had been cured by the defendants. It also said that Smith is the traveling agent of the Union Pacific Railroad Company. Smith declares he is not a victim of catarrh, and therefore has had no cure.

#### Worcester County Pharmacists.

BOSTON, June 19.—The quarterly meeting of the Worcester County Pharmacists' Association was held last week at Lakewood Inn, Worcester, instead of the usual meeting place, the Board of Trade rooms. It was a delightful gathering, and at the business session President W. T. Harris was in the chair. Many matters concerning pharmacy were discussed, and the secretary read a general summary of the work during the last quarter, which showed to good advantage. The resignations of Charles S. Shepherd and A. Ryan were accepted. These two were out of town members. A luncheon was served at the conclusion of the business meeting, and in the afternoon the members enjoyed a series of athletic sports, including a baseball game.

The next meeting of the association will be held out of doors at some one of the summer resorts, and it has been decided to invite the ladies. The officers of the association are: W. T. Davis, president; W. S. Flint, secretary and treasurer.

#### Of Interest to the Trade.

On Sunday, June 15, the Boston Police Board closed every shop but the druggists and newsdealers.

Rutherford B. Rooney, clerk in Henry A. Whitney's drug store in Woonsocket, R. I., has resigned, and accepted a position in a drug store in Newport, R. I.

A well-known Portland, Maine, druggist makes a boast that in his 30 years of business in that city he has not missed attending a circus.

Malt extract of a certain manufacture has been ordered from the windows of some of the stores in Salem, and the order, which came from police headquarters, was complied with.

Frank Corliss of Great Barrington, a clerk in the Whiting drug store, has bought a pharmacy in Sheffield. The seller is Dwight Peck, and the price paid is not made public.

The Sutherland Drug and Medicine Company of Malden have been organized, with a capital stock of \$10,000. The number of shares is 100 and the par value \$100. The purposes of the company are the manufacture, sale and purchase of drugs, medicines, chemicals and sundries. The officers are J. A. McLeod, president; G. B. Sutherland, treasurer, and F. C. Briggs.

## PENNSYLVANIA.

#### Does "Soda" Pay?

PHILADELPHIA, June 20.—The question, "Does a soda water fountain pay retail druggists?" is creating considerable talk in this city. It is contended that in the business section of the city a soda water fountain more than pays, and the owners reap considerable revenue from same. Regarding the small retail store it is not thought that there is much revenue derived from the soda water fountain sales, but it acts as a feeder to other business, and in this way many sales are made that otherwise would not be; as a whole, the druggists contend that a soda water fountain is indispensable, and in certain localities where there is a large summer population the merry phiz of the soda water can be heard at all hours of the day and late at night. Some druggists, however, do not reap much benefit from these fountains, but they are few and far between, and as a rule the owners are druggists who are not up to the times, but all the progressive druggists are in favor of them and would not do without them.

#### MOURNING IN "BURKEVILLE."

There is mourning in Burkeville over the loss of the canary bird "Ted." For the last three years the visitors to William Burke & Co.'s sponge house, at Sixth and Arch streets, have noticed a handsome canary bird flying around the store. The doors and windows were always open, but Ted never took advantage of them, preferring to remain where he was sure of his board and lodging. Last week, however, a bird came to the window and in its own language had a few moments' conversation with Ted, and shortly after they both departed. It is thought that the lady bird took advantage of leap year and inveigled Ted in a trip to Camden, where marriages are easily consummated. This bird was quite intelligent and could do a number of pretty tricks. His loss is mourned not only by his owners, but by all his friends as well.

#### DR. RITTENHOUSE DEAD.

On May 11, Dr. Rittenhouse, who for 30 years had conducted a drug store at 1637 Ridge avenue, died rather suddenly at his residence. For some years past he has become debilitated, and this, complicated with partial paralysis of the body and a weak heart, together with old age, are supposed to have been the cause of his death. Dr. Rittenhouse was born in this city over 80 years ago, his father being one of the extensive Rittenhouse family. Early in life he commenced business as a manufacturer of combs, and operated a small factory at Third and George streets. After this he took up a course of study in medicine at Jefferson Hospital, and when he graduated he opened a drug store at Marshall and Cal-lowhill streets, which he occupied for 30 years, when he moved into the house in which he died. Dr. Rittenhouse was well

known, but lately, owing to his failing health, he was not seen much upon the street. His drug store has not been opened for business for the past six months.

#### DEATH OF A WELL-KNOWN MANUFACTURER.

James Barr, a well known manufacturer of Germantown, died on May 11, at the home of his son-in-law, Thomas P. Prosser, Pelham Road, near Creisheim, of general debility. Mr. Barr was in his eighty-fifth year, and belonged to one of Germantown's very old families. In early life he learned the trade of cabinet making, and when he had finished his apprenticeship he went to Nashville, Tenn. On the death of his wife in that city he returned to Philadelphia and soon went in partnership and established a lumber yard. He was not long in this business and then branched out into the firm of a cotton spinning mill; soon after, however, he withdrew from this cotton spinning firm and entered the spice business with Samuel Singer of Harrisburg at Front and Arch streets. This business was not to his liking, and while he made many friends among the large wholesale druggists in this city, he soon gave it up to go back to the cotton spinning business, at which he remained until he retired. Mr. Barr enjoyed good health until a couple of years ago, when he had an attack of the grippe from which he never fully recovered, although, until a few days before his death, he was able to be about. He was a man of wonderfully retentive memory, and his recollections of happenings in Germantown during the early years of the present century were of immense value to local historians. A daughter and seven grandchildren survive him.

#### Caught Up in Passing.

Charles P. McDonnell has moved from his store at Sixteenth and Morris streets to Fifteenth and Ritner streets.

A. L. Besore is making an addition to his drug store at Seventeenth and Tioga streets.

Peter Steelman, one of the progressive druggists in the southern section of the city, has opened a new store at Fifteenth and Wolff streets.

Eugene A. De Reeves, who has conducted the drug store at Fifteenth and Market streets for the past few years, has parted with it.

David J. Weidner, at Twelfth and Jefferson streets, is having placed in his store a large and handsome soda water fountain.

Addington La Dow, who owns several drug stores in the southern section of the city, is making a number of extensive alterations and changes to the one at Twenty-third and Dickinson streets.

Philip Rovno has purchased a new store at Third and Monroe streets. He is fitting it up in a handsome manner with sundries and label ware provided by J. Maris & Co., and the sponges by Wm. Burke & Co.

E. H. Fay, who has been classed among the Bourbons for a number of years past, has seen the error of his way, and he was noticed among the party which comprised the Union Republican Club as they marched gaily through the streets on their way to the convention at St. Louis.

Harry Schandain and J. L. Supplee, Thirteenth and Green streets, have returned from an extended fishing trip. These fishermen seem to have been supplied with the proper kind of bait, as they met with more than good success, and their friends were liberally supplied with the fish which they ensnared. It is said that these two will soon make a trip to the fishing banks of Maine.

The Pennsylvania Railroad are making a number of important alterations and changes to the pharmacy which is on the ground floor of the main station at Broad and Market streets. This store is being considerably enlarged and the fixtures are said to be among the finest in the country. When completed, it will be double the size it formerly was, and as the architecture is of a special and attractive design, the change is a very notable one. This store is now conducted by Charles T. Pickett, who was formerly connected with Mr. Ware, and has all the latest drug sundries and articles that go to make a ladies' dressing table one of beauty.

## MICHIGAN.

### The Business Outlook.

DETROIT, Mich., June 18.—Business in all lines is quiet both in Detroit and throughout Michigan. The cool weather has been delightful for the majority of people but unseasonable for our business men. The drug trade has revived from the winter because of the introduction of summer lines. Stocks in the suburbs are reported by the jobbers as being very low. Dealers are not buying very generously, but just enough to satisfy immediate wants. This policy has been pursued in Michigan ever since the commercial depression commenced. For a year and a half there was a large number of small failures, and it was seldom that a store could be found that was not plastered with a chattel mortgage. The weeding out process, however, has been kept up, until now the trade can at least be said to be in a healthy condition. No failures have been noticed of late. It is also noticeable that not so many novices are starting new stores as formerly.

#### A FELLOWSHIP IN PHARMACY.

Another fellowship in pharmacy has been established in the University of Mich., at Ann Arbor, by the Committee on Revision of the U. S. Pharmacopoeia. Dr. Charles Rice of New York City is the chairman, and \$400, with college fees and expenses, is the value.

#### News of the State.

Day Bros., druggists of Belding, Mich., have moved their stock to Kalamazoo.

The drug store of O. P. Schuler, at Charlotte, Mich., is in the hands of a receiver.

Humphrey & Rockwell have purchased the drug store of C. A. Young, at Battle Creek, Mich.

The firm of Gonser & Henry, at Ashley, Ind., have been dissolved and the business will be continued by D. E. Gonser.

Samuel H. Kelley has purchased the drug store and business of Allen & Redding at Elkhart, Ind.

Brown & Co., at Kalamazoo, have sold out to Glass & Co., the members of the latter firm being mother and son.

A. H. Hankerson has succeeded F. O. Watrous in the drug business at Caro, Mich.

Calkins & Morrison of Bronson, Mich., have purchased the store of H. J. Shepherd at that place.

Herman G. Watts of Saginaw, Mich., who some time ago sold out to Richter Bros. and retired, has opened a new store in the same city.

Hall & Nichols of Benton Harbor, Mich., have hung a \$75 bicycle in front of their store and will give it to some lucky customer July 4.

The Wagener drug store, one of the oldest landmarks at Big Rapids, Mich., has been sold to George Fairman, who has moved the stock to the store he already owns.

Dr. Wm. F. Hansen, formerly proprietor of a drug store in Lansing, has accepted a position with the Eberbach Drug & Chemical Company of Ann Arbor.

J. W. Fleming of Jackson, Mich., has bought the drug store of W. B. Moore at Saginaw. Mr. Fleming is in the lime, cement and feed business at Jackson, and will run the Saginaw concern by proxy.

Prof. Stevens of the pharmacal department at the University of Michigan, Ann Arbor, with about seventy students, visited the laboratories and wholesale houses of Detroit recently, and went home with a good cargo of ideas.

M. A. Young of the Gladstone Pharmacy at Toronto, Ont., has sold that concern and purchased the store of C. A. Seeley at Lansing, Mich. Mrs. Ellen J. W. Meacham is the purchaser of the store at Toronto.

About fifty Chicago druggists visited Detroit recently and were entertained by Parke, Davis & Co. They were given a lunch in the big hall of the laboratory at 11.30; then driven around the city and Belle Isle, and given a frog leg supper at Grosse Pointe in the evening.

Edward Wetzel, secretary of Parke, Davis & Co., keeps a tiger's skull, with a magnificent set of teeth, on his desk as a terror to intruders and bores. The skin of the same tiger adorns the floor of his library in his residence. It was sent to him by the company's agent in India.

Frederick Stearns will represent the Detroit pharmacal interests in the delegation of the National Manufacturers' Association, which will travel in South America in July and August. The company of which Mr. Stearns is the head is pushing foreign trade with a great deal of energy.

Ruddell & Conway are a new firm who succeed Conway & Co., at Sault Ste. Marie, Mich. A few months ago Mr. Conway of that firm purchased the stock of the failed Wastell drug house at Port Huron, but has sold it to A. H. Tibbetts.

A burglar broke into the drug store of A. S. Parker, 747 Woodward avenue, Detroit, and stole about \$4 in pennies and a number of pairs of scissors. He cut himself badly in getting through the window, and was traced to a considerable distance by the blood.

M. M. Turner of Quincy, Mich., who was recently married to Miss Blanche Baker, has purchased the drug store of E. J. Condra of that place and will be-

come a resident. Mr. Condra intends to locate in Norfolk, Va., as soon as he can settle up his business affairs at Quincy.

Dr. J. Fabry of Benton Harbor, Mich., has removed his drug store to more commodious quarters and has consolidated with Harry Weber, a cigar and tobacco dealer, who will have a position in the store and look after that branch of the business.

Elmer Burns, the popular clerk in C. H. Houghtaling's drug store, at Quincy, Mich., was married a short time ago to Miss Musa Whitaker of Burr Oak, Mich. They were married in the evening at the home of the bride and took the evening train for Quincy, where they commenced housekeeping.

Thieves broke into the Hull drug store at Vermontville, Mich., a short time ago and a quantity of liquors were taken. The thieves then got uproariously drunk on the stolen booze and were soon captured at Charlotte and locked up to await trial. As each says the other was the guilty party, there will not be much difficulty in securing a conviction.

An attempt was made recently to burglarize the drug store of A. A. Clark at Battle Creek, Mich., by cutting the screen door and breaking the glass in the front door. The latter operation made so much noise that a lady who was asleep on the other side of the street was awakened and saw the men running away, but was not able to identify them.

A. E. Ewing, state attorney for the Michigan State Board of Pharmacy, made a two weeks' pleasure trip in the southern part of the State in June, and visited his parents, who reside 12 miles south of Hillsdale. The tour also had some business in it, as he overhauled an erring druggist at Quincy and gave him a lesson in the majesty of the law, which cost the brother \$16. Mr. Ewing resides at Grand Rapids.

A few years ago Frank A. Schulte, at Saginaw, Mich., wished to buy goods at Detroit, and Henry Schust, a baker, gave a written guarantee to Williams, Davis, Brooks & Co., thus enabling Schulte to obtain credit. Some time ago Schust discovered that Schulte had given a mortgage on the stock, and to protect himself he bought out the mortgagees, and thus came into possession of the store. He is now a druggist as well as a baker.

Ex-Alderman and ex-Druggist James Verner of Detroit having established a manufactory of his famous ginger ale at 83 Woodward avenue, Detroit, recently gave the members of the press a reception at the office and salesroom, and filled them up with the harmless beverages he makes. Mr. Verner was until recently one of the largest retail dealers in drugs in this city and paid the highest wages per hour to his employees.

Warrants were issued for Jonas T. Kutt, George Whitten and E. E. Lester of Grattan, Mich., on the charge of dispensing remedies without being registered pharmacists. The penalty for this offense in Michigan is a fine of not less than \$10 nor more than \$100, or imprisonment not less than ten days nor more than 90 days in the county jail, or both fine and imprisonment, at the discretion of the court.

While D. M. Russell, a clerk in the drug store of Thum Bros., Grand Rapids, was generating gas in a 35-gallon can,

the gas exploded and tore the entire apparatus into a thousand pieces. He escaped without injury, although one of the fragments tore a sleeve nearly off. The report of the explosion was heard some distance and caused the people to rush into the streets, supposing a serious disaster had occurred.

A good joke was played on Alderman Holland of Benton Harbor, Mich., who, besides being an Alderman, is a druggist. He has been charged with being a member of the A. P. A., an anti-Catholic secret organization, but has always emphatically denied it. Recently painters were making a large sign on the end of his building to advertise Holland's Sarsaparilla. They had the word sarsaparilla marked out, and commenced in the middle of the word to paint the letters. They finished the three letters A P A and then as it was quitting time in the evening they went home and left the obnoxious initials of the society staring the public in the face. It cost Mr. Holland a few boxes of cigars.

## ILLINOIS.

CHICAGO, June 19.—Business generally for the last two weeks has been very quiet among the city trade. The cool damp weather has had a depressing effect on the soda trade, which hitherto had been very good. The jobbers report a good business from out of town and are expecting considerable improvement in the near future.

### CHICAGO COLLEGE MEDAL.

The Chicago College of Pharmacy received their diploma and bronze medal for their exhibit at the World's Fair on the 8th inst. The delay in distributing the medals is so well known, and has been the subject of so many items in the papers by the funny man, that the receipt of the medal and diploma is a matter of congratulation to the members of the college. The medal and diploma will be exhibited in one of the prominent drug store windows.

Hermann Foersterling has opened a new drug store at the corner of Wells and Division streets, and Frantz & Cox have taken the premises at the corner of Sixty-ninth street and Wentworth avenue, which they will occupy as a drug store. Both of these firms purchased their entire outfits through John F. Matthes, the Western manager of Whitall, Tatum & Co.

### DRUGGIST'S SUIT FOR FALSE ARREST.

Charles C. Kehner, druggist, at the corner of Menominee and Sedgwick streets, has sued Coroner McHale for \$25,000 damages for false arrest and imprisonment. At the inquest held on the body of Adolph Hensel, on May 14, Kehner testified that Hensel had come in haste to his store and asked for chloroform in order to save a life, representing that he had been sent by a physician. On this representation he was furnished with the drug. Later he heard that Hensel had committed suicide with the poison. Coroner McHale caused Kehner's arrest and he was locked up for several hours. The grand jury exonerated him completely.

### CHICAGO COLLEGE OF PHARMACY.

The Chicago College of Pharmacy, which has recently become the School of Pharmacy of the University of Illinois, will begin its next session Tuesday, Oc-

tober 6, 1896. The faculty will consist of F. M. Goodman, professor of botany and materia medica; Carl S. N. Hallberg, professor of pharmacy and director of the dispensing laboratory; W. A. Puckner, professor of chemistry and director of the chemical laboratory; Frank S. Hereth, director of the pharmaceutical laboratory; W. B. Day, director of the microscopical laboratory; A. D. Thorburn, instructor in chemistry; Geo. E. Case, instructor in dispensing; L. I. Schreiner, instructor in microscopy, nearly all of whom have been connected with the college for many years. Extensive improvements will be made in the college building, at 465 State street, and important additions made to the equipment during the vacation.

### ILLINOIS COLLEGE OF PHARMACY.

An important change has been made in the programme of the Northwestern University School of Pharmacy. Junior students will hereafter be admitted only on September 1, and no junior class will be taught during the spring semester, from February 1 to the end of the university year. Prof. Henry Kraemer will return from Germany toward the latter part of July to enter upon his duties in our school.

The R. W. Davis Drug Company have been incorporated, with a capital of \$2,500, by Hulda Mauss, Charles B. Haake and Henry Mauss.

George R. Baker of Clark and Van Buren streets has purchased the Ashland Pharmacy, at the corner of Clark and Randolph streets.

Prof. A. W. Palmer, the Dean of the College of Sciences of the University of Illinois, visited the Chicago College of Pharmacy on the 16th, in connection with the changes and additions to the college.

O. T. Eastman of the Searle & Hereth Company left here on the 16th for an Eastern trip, during which he will attend the alumni reunion of Amherst College and spend some time at his old home, at Framingham, Mass.

Armour & Co. of Chicago are about to add a soap factory to their plant, to be known as the Armour Soap Works. It is understood that a vigorous policy of competition against foreign soap makers is to be inaugurated.

C. F. Fischer has opened a new pharmacy at the corner of Bryn Mawr and Winthrop avenue, Edgewater. The stock of pharmaceutical products was supplied by Sharp & Dohme, through Charles E. Matthews, their Chicago representative.

Frank E. Delvil, for several years connected with the crutches department of R. Boericke & Co., has, after an absence from Chicago for two years, taken charge of a similar department for the Home Rattan Company, who succeeded to the business of R. Boericke & Co. The department has been thoroughly reorganized and now has ample facilities for manufacturing and prompt shipment, and as Mr. Delvil is a man of practical experience, this branch of the Home Rattan Company's business is in good hands.

Jean Danyez of the Pasteur Institute, Paris, is expected here in a few days. He is making a short visit to this country for the purpose of installing the labora-



tory of the Pasteur Anthrax Vaccine Company in this city. M. Danyasz is the discoverer of the virus for exterminating rodents by contagious disease.

The physician of Chicago enjoys peculiar privileges as regards transportation. For 50 cents he can procure of the city clerk a badge with a red cross which gives him the right of way. The physician can then pin on the badge and mount his wheel or carriage, and all vehicles are obliged to yield him precedence.

On returning home from spending the evening of May 20, with some friends, John F. Matthes, who was accompanied by his wife, found that during their absence burglars had entered their residence in Oak Park, and were disturbed by the entrance of Mr. and Mrs. Matthes. On examination of the house they found on the kitchen table a quantity of silverware, bric-a-brac and clothing ready for removal. Fearing that the burglars were in hiding in the barn at the rear of the house Mr. Matthes took his revolver and made a search for the intruders. He located them at the rear of the barn, but not in time to effect their capture, though he fired upon them without any result as they made their escape.

## MISSOURI.

### ALUMNI ASSOCIATION SEES MALT-NUTRINE MADE.

Thursday afternoon, May 12, was a holiday for many St. Louis pharmacists. The malt-nutrine department of the Anheuser-Busch Brewing Association of this city invited the Alumni Association of the St. Louis College of Pharmacy to come down and inspect the plant. May 12 was set apart for the occasion, and the members turned out in force. After a trip through the plant they all repaired to the private dining hall, where the various products of the Anheuser-Busch plant were served, together with an elegant lunch.

### PROFESSOR HEMM SUCCEEDS DR. CURTMAN AT THE MISSOURI MEDICAL COLLEGE.

Hardly had the announcement of the death of Dr. Curtman spread over the city than speculation was rife as to who would take his place at the Medical College. It was universally admitted that it would be next to impossible to find a man who could fill the place as he had. There was little surprise on the morning of May 1, when the information was given out that Francis Hemm had been elected professor of chemistry at the Missouri Medical College, and had accepted the position. Professor Hemm received his early instruction in chemistry under Dr. Curtman, and during the past ten years they were associated together in the College of Pharmacy.

### City News.

J. M. Willmeyer has recently opened a handsome new drug store at Marcus avenue and Natural Bridge road.

P. C. Schols succeeds Frank H. Westmann at the drug store at Taylor street and St. Louis avenue.

L. A. Seitz, 718 South Fourth street, has just returned from a fishing trip down on Black River.

R. E. Drace, Ph.G., formerly with the Clinton Pharmacy, now has charge of

the City Hall Drug Store, Twelfth and Chestnut streets.

O. F. Fischer, Ph.G., has charge of the prescription department of the C. P. Ochsenr Pharmacy, Thirty-ninth street and Finney avenue.

All who wish to try the examination of the Missouri Board of Pharmacy will have an opportunity to do so at Sedalia, on July 6, 1896.

W. U. Zahner has sold his drug store, 1201 Grand avenue, Kansas City, to Albert N. Doerschuk, who has been with him six years.

Miss Ida Wetzel has resigned her position with the drug store at Twelfth street and Lafayette avenue. For the past three years she has been the only lady drug clerk in St. Louis.

F. W. Sihler of Kansas City has gone to Fort Wayne, Ind., to take a prominent position with the Meyer Bros. Drug Company of that city. Mr. Sihler has been with the Evans-Gallagher Drug Company of Kansas City for many years. As chairman of the Entertainment Committee of the Missouri Pharmaceutical Association he has made hosts of friends, who will seriously regret to have him leave the State.

R. J. Brown, the well-known patent medicine man of Leavenworth, Kan., was in the city last week shaking hands with his many friends. It is reported that Mr. Brown came here to see about establishing a stock company of retail pharmacists for the purpose of manufacturing patent medicines to be kept exclusively in the hands of non-cutters and to take the place of the regular patents, similar to the plan operating in Chicago. It is reported that after a thorough investigation Mr. Brown has decided to let the matter drop, for the present at any rate.

## OHIO.

CINCINNATI, Ohio, June 18.—The City Hospital is to have a new superintendent and resident physician. Superintendent Frank W. Hendley is to be succeeded by John Fehrenbach and Dr. Charles Castle is to give way to Dr. Lawrence Shields. Dr. Hendley has made one of the best superintendents of the hospital that was ever known, and the reason for turning him down cannot be imagined unless the politicians want to run everything. His administration has been economical, despite the fact that his appropriations have been cut down from year to year. It may be that a change will be good in one way. "One of the gang" can get more money to spend on the hospital. Fehrenbach stands in with the "push," and that is all the explanation that can be offered for his selection to succeed Dr. Hendley. Dr. Castle, the retiring resident physician, is one of the best doctors in the West. He is a gentleman and a most thorough student. He is to be associated with Dr. P. S. Conner, the well known surgeon. What will become of the other present *attaches* of the hospital remains to be seen.

### Local Notes.

Soda water business is very dull just now.

George Kylius has given his pretty store a new coat of wall paper.

Harry Streithorst has joined the benedicts.

Ed. Voss is always found in rooters' row at the ball park.

Soda fountains are now going full tilt in all parts of the city and suburbs.

Dr. George Eger, Jr., has returned from Europe, where he has been for the past two years.

Prof. Charles T. P. Fennel went to St. Louis with the Young Men's Blaine Club of this city.

Albert Vogeler of the Stein-Vogeler Drug Company is out again after wrestling with the rheumatism.

Mrs. Anna Gertrude Sauer, mother of Dr. Louis Sauer, the well known pharmacist, died a few days ago.

The Cincinnati College of Pharmacy is now on the boom and applications from students are coming in rapidly.

George Kylius, the popular druggist at Liberty and Denman streets, is remodeling his pretty pharmacy.

Frank Grote of the Grote-Greenland Chemical Company has just returned from an extended trip through the West.

Prof. John Uri Lloyd and a party of friends have gone on an extended trip to the Southwest. They will be gone for several weeks.

Frank Kollmeyer, the clever clerk at Fennel's Pharmacy became a benedict the other day. His bride was Miss Anna Stroeder, a local belle.

Sterilized milk for babies is now being sold at stations throughout the city. The scheme has the sanction of the Health Department.

Dr. John F. Haynes, who was here a few days ago, is now on the road for the Schieffelin Company of New York. The doctor is a hustler.

A Covington druggist presented Germany Smith of the Reds with a fine toilet set for making the first home run of the base ball season.

The physicians and druggists of Covington played a game of base ball last week in which the former were victorious. Councilman Ed. Pieck was in the game.

George Budde, the hustling manager of Stein & Vogeler's sundry department, made a trip up the C., H. and D. road last week, and reports business as booming in that neck of the woods.

Louis Klayer has refitted his pretty store at the northeast corner of Ninth and Elm streets, and he now has one of the nicest places in the down town portion of the city.

Nearly all the German society ladies in the city called on Mr. and Mrs. C. H. Mueller the other day to help them celebrate their wedding anniversary. Mr. Mueller is the veteran druggist at Fifteenth and Race streets. It was the aged couple's thirtieth anniversary.

All the wholesale druggists and jobbers of druggists' sundries now observe the half holiday law on Saturday, and it gives the boys a chance to take a breathing spell on the last day of the week. This move was taken long before it was made legal by the last General Assembly.

The Ohio Institute of Pharmacy has been incorporated, with headquarters in



E. K. HOGE. C. MENKEMELLER. G. EEBLING. H. SCHROEDER. DR. J. R. MANLEY. S. PARKER.  
F. M. YOUNG. C. R. GOETZE. H. STEWART. J. COLEMAN. C. SINCLAIR. W. W. IRWIN. A. SCHEERLE. J. A. EHRLE.  
JOHN KLARI. WM. HAGUE. C. SCHNEFF. H. F. PFOST. E. P. SYDENSTRICKER. J. W. BROWN. A. T. YOUNG. JOHN G. MCCLAIN.

THE WHEELING, W. VA., DRUGGISTS' ASSOCIATION ENTERTAIN THE WEST VIRGINIA BOARD OF PHARMACY.

Columbus and a capital stock of \$1,000, the object being the supplying of a system of home study in the science of pharmacy, chemistry, botany and materia medica in their relation to the practice of pharmacy. The incorporators are P. A. Mandabach, Paul J. Mandabach, D. F. Murphy, John C. Mandabach and B. Mandabach.

Azor Thurston, the well-known Grand Rapids druggist, is the author of a very interesting paper on the soils of certain districts in Ohio. The subject of artificial sterilizers is considered from the standpoint of the chemist and fully elucidated. The paper was read before the Tri-county Farmers' Institute at Grand Rapids, and was published in its entirety in the *Wood County Sentinel* for February 6 by a vote of the Institute.

The president's fellow at Bryn Mawr College for 1896-97 is Miss Clara Langenbeck, who graduated from the Cincinnati College of Pharmacy in 1890, took the degree of S. B. from the University of Cincinnati in 1895 and was for the year—1895-96. This fellowship is of the value of \$500, and will afford one year's residence and study at some foreign university. It was founded a short time ago by Miss Mary E. Garrett of Baltimore, and named by her in honor of M. Carey Thomas, president of Bryn Mawr College. It is open to students in the first year of graduate work and is now bestowed for the first time.

A few nights since Mr. and Mrs. George Kylius celebrated their tin wedding at their pretty home at Liberty and Denman streets. The apartments over the Kylius pharmacy were prettily decorated, and the host and hostess made every one feel perfectly at home. A large number of guests, including the most prominent people of the city, were present, and the festivities were enjoyed by all. An original poem was contributed by Mr. Laycock, the well known school

principal. After the guests had been regaled by vocal and instrumental music dancing was indulged in until a late hour. The presents which Mr. and Mrs. Kylius received were varied and costly.

Before his departure for an extended trip through the West, Prof. John Uri Lloyd, the well-known chemist and writer, who is the author of "Etidorpha," the reigning craze with literary people, was tendered a reception at the residence of Insolvency Judge A. McNeal, in Norwood. An elaborate menu was served and every one present made the most of the occasion. The third edition of Professor Lloyd's book has already been sold and the fourth edition is now in the press. Local book dealers say they are receiving orders from all parts of the country and that its popularity is not even second to that of Du Maurier's "Trilby."

## VIRGINIA.

RICHMOND, June 15.—The Richmond Drug Association, at its meeting on April 9, adopted a resolution to have a list of non-secret preparations put up by manufacturers of ability and reputation. The druggists here are at last awakening to the fact that for so many years they have been mere distributing agents, used at the discretion of the patent nostrum makers. With those members of the association this imposition will soon be thrown off, and instead of being the mere tools of different manufacturers they can have preparations made and sold that are above the reproach of either the public or profession. The contract for the first preparation, that of a Sarsaparilla, which is put up in two sizes for retailing, was awarded the Virginia Pharmacy Company of Richmond.

### MR. MILLER RESIGNS.

There is trouble between the Richmond druggists and T. A. Miller, presi-

dent of the Virginia Board of Pharmacy and Professor of Pharmacy in the University College of Medicine. As a result Mr. Miller last Saturday mailed his resignation as president of the Virginia Board of Pharmacy and forwarded to the faculty of the University College of Medicine his resignation of the chair of the department of pharmacy and as Professor of Theoretical Pharmacy in that institution.

Until recently harmony prevailed between the president and the association. The immediate cause of the declaration of hostilities is a new departure taken by Mr. Miller in his business.

A short time ago Mr. Miller advertised that in future he proposed selling patent medicines and other similar preparations at prices which, his neighbors aver, are less than they pay the jobbers for the goods. Mr. Miller, when interviewed, said that in so doing he was simply following the example of his competitors. He said he had decided to do above board just what the other druggists of the city were already doing under cover. His purpose was to bring custom to his establishments.

### Personals

Swank Bros. have purchased the drug store of Dr. W. F. Farrar, at Lason and Nicholson streets.

There is to be a new store on West Main street. J. F. Gibbony is to be the proprietor.

About 20 applications for sixth class licenses have been filed with the city clerk of Salem by the local druggists.

F. M. Loring, the Harvard street, Dorchester, druggist, has been suffering recently from an attack of rheumatism.

Rashier W. Miller, who has been studying medicine at the University College, has returned to his home in Pennsylvania.

**Recent Incorporations.**

**Missouri.**—The Antiseptic Pharmacal Company of St. Louis; capital stock, \$10,000. Incorporators, C. M. Barry, Alfred Bevis, F. E. Roth.

**Laird Drug Company of Kansas City;** capital, \$3,000. Incorporators, T. H. Reynolds, J. H. Laird, H. W. Laird.

**Bennett Drug Company of Pierce City;** capital stock, \$4,000. Incorporators, G. W. Bennett, Thomas Bennett and John German.

**New York.**—The Acme Spirit Company of New York City. To deal in alcohol, chemicals, dyestuffs, etc. The capital stock is \$250,000, and the directors are Henry Graham, Robert Young, John F. Hemenway and F. A. Haynes of New York City, and H. J. Daggett of Philadelphia.

**Illinois.**—The Chicago Proprietary Medicine Company at Chicago; capital stock, \$50,000; to manufacture medicines. Incorporators, Josiah Cratty, Alfred E. Manning and Charles A. Turner.

**H. W. Davis Drug Company, at Chicago;** capital stock, \$2,500; to manufacture drugs. Incorporators, Hulda Mauss, Charles B. Haake and Henry Mauss.

**An Electric Hot Water Bottle.**

A novelty in hot water bottles has been recently placed on the market by W. S. Hadaway, Jr., 107 Liberty street, this city, under the name Electric Hot Water Bottle. The new bottle does away with the annoyance caused by leakage and cooling in filling rubber bottles with hot water by the ordinary methods. With the new bottle the water is heated within the bag by means of a suitable electrode connected by wires leading out of the plug, and the water is kept at an even temperature by regulating the supply of current. The wires supplying the current are inclosed within a suitable covering and attached to a plug which can be fitted on to any convenient electric lamp socket when the current is turned on by a simple adjustment of a switch.

**See to Your Medicinal Soaps.**

The druggist who lends his name to a preparation which is being made for him must have implicit confidence in the integrity of the manufacturer. Few articles nowadays undergo more adulterations than soap, which article ought to stand as meaning purity; but, owing to the fact that such adulterations are easily concealed, many unscrupulous makers who have never had a good reputation or ever expect or care to gain one, are taking advantage thereof, and under the guise of always selling goods a little cheaper and cheaper, try to effect sales on account of cheapness only. Now as to medicinal soaps. Purity is not only essential, but a necessity, and no good druggist should take chances and handle medicinal soaps simply because they are cheap when he has no further guarantee that the goods are such as a physician means his patient to have. For this reason only has the trade in medicinal soaps remained exclusively in the hands of the druggists, and therefore they should beware that it does not get into the hands of grocers or dry goods houses who have no reputation to sustain in this direction. Medicinal soaps should be carefully prepared from the purest soap

stock in order to be effective, as adulterated stock will neutralize the medicinal ingredients. The best safeguard for obtaining pure soaps is, of course, the reputation acquired by manufacturers who have made this line a specialty for years and whose goods are a household word with every druggist in this country. We wish to refer our friends to J. Thalheim Company, whose specialty is to put up medicinal soaps under druggists' names, and who have succeeded in gaining the confidence of the trade during their career of the last ten years. Their ad. will be found in this number.

**Kuehn & Lubbers' Removal.**

Customers of the E. L. Patch Company in New York and adjacent territory should take note of the fact that Kuehn & Lubbers, the New York selling agents of the firm, have removed their offices from 96 Fulton street to 133 William street, this city. All orders and communications for the E. L. Patch Co. from New York, New Jersey and Pennsylvania should be sent to Kuehn & Lubbers at this address. Kuehn & Lubbers carry a full stock of the many pharmacopoeial preparations and specialties manufactured by the E. L. Patch Company, and by sending orders to their office in New York customers in this territory will insure prompt shipment and an avoidance of the delays incident to the transfer of orders.

**American Medicated Soaps.**

There is no doubt that the German medicated soaps were for a long time given the preference over those made elsewhere, but of late the American manufacturers have succeeded in demonstrating that they can make medicated soaps which will compare favorably with those of German origin. Among the latest comers in this field are Schieffelin & Co. of New York, who in their new laboratory have fitted up a department with all the latest and most approved devices for making and milling medicated soaps.

In this new department Schieffelin & Co. not only utilize all the latest mechanical appliances, but they also bring to bear upon the work highly trained chemical experts, who will not be content with merely following blindly the routine methods generally in vogue. An indication of the scientific and original manner in which they handle the subject is shown in the introductory leaflet on medicated soaps, which they will gladly send to any of our readers who ask them for it.

In this leaflet they explained several very important points about the manufacture of corrosive sublimate soap which every druggist should be posted on. Their line of medicated soaps already includes all the most generally used soaps, and will rapidly be extended to cover every kind of medicated soap which has been proven to have any real therapeutic value. In all these soaps, as in their other goods, quality will always be the first desideratum.

**Recent Business Changes.**

Oscar Leistner & Co. have moved from the Cable Building, corner Houston street and Broadway, to 70 Warren street, New York.

W. B. Bunnell of Harrisburg, Ark., has taken a partner, the name of the firm now being Bunnell & Luke.

Driver Bros. of Osceola, Ark., have sold out to R. E. Fletcher & Co.

Elias Holladay of Los Gatos, Cal., has sold out to E. E. Evans.

Barrett & Boone have succeeded J. M. Morrow & Co. of Tulsa, I. T.

The firm of T. W. Shackle & Co. of same town has been succeeded by Shackle & Hall.

Chas. C. Pike has succeeded Newbrand & Pike at Oskaloosa, Iowa.

J. S. Taylor of Lafontaine, Kan., has sustained damages to the amount of \$300 by the recent cyclone.

Chas. E. Hollister, Detroit, Mich., has taken a partner. The name of the firm is now Hollister & McIntire.

A. W. Hanson, Hartland, Minn., has been succeeded by Jas. C. Jensen.

A. McLaughlin, St. Paul, Minn., has been succeeded by David M. Aronsohn.

W. E. Stevenson & Co., Rolling Fork, Miss., have sold out to J. E. Meek.

Traverse Bros. of Trenton, Mo., have sold out to C. B. Dennis.

Bentson & Miller have succeeded B. L. Bentson, Britton, S. D.

Petty & Perry of Des Arc, Ark., have sold out.

N. A. Tanner, formerly of Kingsville, Ark., has moved to Imboden, Ark.

Bristol & Rowley have succeeded C. C. Fife at Santa Ana, Cal.

Lake, Hobson & Co. have succeeded J. R. Hobson & Co. at Canford, Florida.

L. S. Stone of Granville, Ia., has sold out.

Ripley & Co. have succeeded W. C. Titus & Co., Kingsley, Ia.

Crawley & Bradford have succeeded E. S. Crawley, Medford, Mass.

Geo. E. Swift, formerly of Robinsdale, Minn., has moved to Minneapolis, Minn.

Ross Bros. of Oak, Neb., have sold out to J. H. Allen.

**Decorated Pill Boxes.**

The accompanying illustrations give some idea, though but an imperfect one, of the handsome appearance presented by the decorated pill boxes made by Joseph G. Taite's Sons of Philadelphia.

These boxes are of convenient size to be carried in the vest pocket, and hold just 1 dozen pills. They are all labeled and ready for use when they reach you. They are stronger and more durable than pasteboard and are smaller and more artistic in appearance than wooden boxes. They do not absorb moisture from the pills, as wood or pasteboard boxes do.

The lids are easily removed. By the style of box the edges of the lid and body come flush together without a bead, making the sides very neat and greatly facilitating the ease with which the lids are taken off.

They are lacquered inside, thus preserving a bright surface and preventing the pills from being discolored.

They are handsome and attractive, being neatly made of bronzed tin, with lithographic lids of olive green. They can be had of all jobbers by specifying Taite's.





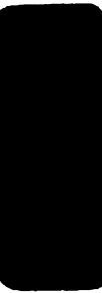








2 gal  
256 +





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